Detroit Neighbourhood Stabilization:
Burdens become Assets

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

Detroit is just one example of a post-industrial city that has been struggling with the decline of the American industrial economy. In the past 100 years, Detroit city has gone from one of the largest and most promising cities in the world to a widely vacant, run down, and crippled metropolis. A shell of its former self, Detroit has become the poster child for all the problems that many North American cities experience, including: pollution, crime, urban sprawl, suburban flight and struggling education systems. Among others, these deterrents have driven Detroit residents from their homes and left the City largely abandoned. Since the mid 1950s the population has fallen from 1,900,000 to 713,000 in 2010.[1] Enrollment in Detroit public schools has fallen from approximately 300,000 in 1966[2] to 52,000 in 2012.[3] Today there are an estimated 40 square miles of vacant land and more still with abandoned buildings plaguing the landscape.

This thesis asks the question of how best to utilize abandoned public schools as an asset for the neighbourhoods of Detroit. Once symbols of hope and prosperity these vacant schools located in the heart of many struggling neighbourhoods, now serve as a reminder of the disparity and blight that plagues Detroit. The adaptive reuse of abandoned schools as community driven educational centers, with a focus on urban agriculture, can lead the way towards self-sufficient neighbourhoods that allow residents to challenge the social and economic paradigm that is Detroit.

The subject of this thesis concerns the transforming of burdens in a blighted city into the assets needed to improve the quality of life for distressed citizens. This thesis argues that this is possible by formulating an architectural response utilizing existing abandoned schools and vacant land to nurture a growing Urban Agriculture initiative that has the potential to play a role in the rebuilding of city neighbourhoods.

1 "2010 Census Interactive Population Map" *2010 Census,* http://2010.census.gov/2010census/popmap/ (accessed July 10th 2012)

2 Jeffrey Mirel, *The rise and fall of an urban school system: Detroit, 1907-81. 2 ed.* (Ann Arbor, Mi.: University of Michigan Press, 1993), pg 413

3 Detroit Public Schools, *Fiscal year 2013 Proposed Budget* (Detroit Mi.: Detroit Public School board, 2012) pg 10

Acknowledgements

I would first like to acknowledge the many professors, architects and mentors who have taught me so much and have put their faith in me throughout my post-secondary career. I'd like to extend a special thank you to my thesis committee, Terri, John, and Lloyd for guiding me through this process with much help and advice.

I would like to thank my parents. Mom and Dad, without the support and encouragement you have given me I would not be the person I am today and would not have been able to achieve what I have.

Thank you to all of my friends, for forcing me to take breaks and being supportive when I could not.

Finally, this work is dedicated to my wife, Lisette. In a lifetime together I will never be able to thank you enough for all of the love, support and encouragement you have given me. You are my fave.

Contents

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Prologue

"Most big cities do have the same problems as Detroit… and in some cases they are worse… But you come here and you get the feeling that this is what the end of the road looks like."[1]

Jerry Herron, "I Remember Detroit" (2004)

In the two years, I spent commuting across the Ambassador Bridge and through Detroit on-route to attend classes at a University in the suburb Southfield, I must admit, I avoided leaving the highway as much as possible. As someone from outside the city, whenever I have found myself navigating the streets of Detroit, I have found that I cannot help but feel incredibly uneasy. Throughout the last five to six years, I have met with and enjoyed conversations with many people from Detroit: students, teachers, neighbourhood committee members, public service agents, random people on the street, even the homeless. They all seem nice enough. The feeling of uneasiness I have does not come from the people of Detroit, but from the environment itself. This feeling can only be described as the feeling of being left alone and vulnerable, completely abandoned.

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[1] Jerry Herron, "I Remember Detroit," *Shrinking Cities: Detroit III Working Paper*, p. 33

Introduction

During the time of the Industrial Revolution, great progress was made, and many American cities were built on a manufacturing foundation. With the ability to mass produce goods that would improve the quality of life for people everywhere, came a period of intense growth in American *rust belt* cities. The city that benefited the most from this movement was Detroit, Michigan. During this period of growth, the citizenry of Detroit and other American cities began to adopt a way of living that eventually became known as the American Dream. However, somewhere along the way, many industrial cities transitioned into post-industrial cities. As a result of several decisions intended to popularize the American Dream, Detroit, in particular, has instead seen a massive decrease in both manufacturing jobs and population, leaving the inner city vacant, abandoned and bankrupt while the overall Metro Detroit grew, both economically and in population. This phenomenon, known as decentralization, has caused Detroit city to lose over 60% of the population held in the early 1950s.

Of the American post industrial cities, Detroit is the one that grew the fastest and was hit the hardest by a decline. Now Detroit has become the poster child for urban blight, a cautionary tale for all North American cities. Just as in the beginning of the Industrial Revolution, all eyes are on Detroiters to see what path they will take. In the past, many years and billions of dollars have been spent trying to bring Detroit back to its former glory. Only now are those in charge beginning to accept that this may be impossible. After 6 decades of decline, the focus must finally be turned to improving the quality of life for the residents who have remained in the city.

As such, this shift in perception has led to the following research question, which this thesis will address: How can architecture and urban planning help to redefine the local identity of distressed neighbourhoods and improve the quality of life for the residents of Detroit, Michigan?

Over the past 60 years Detroit has accumulated many burdens that continue to drive people from the City, stifling any effort to revitalize the population. The decline of industry in the City has left millions without work and the continued loss of the population to the suburbs has left much of the city vacant. Abandoned buildings and vacant lots litter the landscape perpetuating an intense feeling of uneasiness and even fright whilst navigating the streets of Detroit. These burdens have weighed heavily on the neighbourhoods of Detroit for many years. This thesis proposes that the strategy for stabilizing these neighbourhoods be centered on the idea of utilizing existing conditions, and the burdens that have plagued Detroit, as assets to improve the living conditions in Detroit neighbourhoods.

The following is an outline of the structure for this thesis.

Part 1 of this thesis will be a brief history of Detroit broken into three sections. The first section titled "The Rise of Detroit," outlines the origins of the city and the growth from a small settlement into a manufacturing powerhouse for the United States. The second section titled "The Abandonment of Detroit," delves into the policies and tendencies that led to the drastic decline in population and living conditions in the City. The final section of Part 1, titled "The Detroit Public School Crisis," reveals the history of the Detroit Public School Board as a major burden on the citizens of Detroit.

Part 2 of the thesis will be a study of the existing context in Detroit today and is broken into three sections. The first section, titled "The Detroit Works Project," outlines current initiatives by the city of Detroit to optimize city services. Data related to the population of Detroit is present in this section as a means to contextualize the Thesis. The second section of Part 2, titled "Urban Agriculture Movement in Detroit," examines the growing movement of urban farming in the City. In this section, the history of urban farming in Detroit is explored as well the current values and challenges the movement faces. In the third section, titled "Adaptive Reuse of Abandoned Architecture in Detroit," the thesis discusses the available building stock in the city, and the benefits associated with reusing existing buildings for new uses as opposed to demolition.

Part 3 of the thesis presents five case studies that exemplify possible solutions to the burdens of Detroit. Each case study is an example of a community driven initiative undertaken in cities across the United States in response to the needs of the communities they serve. The first case study, Viet Village in New Orleans, Louisiana, is a proposal for an urban farm meant to provide support to a community in the wake of the 2005 hurricane Katrina, which devastated several New Orleans neighbourhoods. The second case study, Greensgrow farms in Philadelphia, Pennsylvania is an urban farm located on a former industrial site. The third case study, Lansing's high-tech schools in Lansing, Michigan, reveals several cases of adaptive reuse of abandoned schools for high-tech industries. The fourth case study, The Smiley Building in Durango, Colorado is an example of ways to implement sustainable practices in the adaptive reuse of a historic building. Finally, the fifth case study, Badger Rock School for Urban Agriculture and Community in Madison, Wisconsin outlines another example of adaptive reuse, this time with a focus on urban agriculture as a teaching method.

Part 4 of the thesis presents a design intervention proposal that aims to provide a strategy for the stabilization of Detroit neighbourhoods through the reuse of existing, under-utilized assets found within. For this proposal, Part 4 will present a series of stages that outline the steps necessary to establish an institution for a neighbourhood association that would act as a community agricultural learning center. Strategies for the reuse of existing vacant land and abandoned buildings will be presented as will the development of a program that could provide support to a budding grassroots movement that has the potential to change the city.

Part 1: A Brief History

The Rise of Detroit

Settlement

The first Europeans to land and make camp on the land that is present day Detroit were led by an ambitious French naval officer named Antoine Laumet de la Mothe, sieur de Cadillac. It was June 7, 1701 when Cadillac sailed from the Montreal area with roughly one hundred French soldiers and artisan on twenty-five large Canoes. The river near Montreal was named "le Detroit", which in English means "the strait". It wasn't until July 24, 1701, when Cadillac and his men landed on the north shore of a narrow stretch of the Ottawa River and made camp. The area that would be present day Detroit, at this time, was a beautiful landscape that was both defensible and open enough for a large settlement which Cadillac named *Fort Pontchartrain du Detroit*.[1] In letters to his superiors, Cadillac described the site as, "a meadow rimmed by fruit trees leading into a dense forest of walnut, white and red oak, ash, and cottonwoods, all entwined with thick vines that provided cover for turkey, pheasant, and quail. Deer grazed at the edges and nibbled on fallen apples, plums, and other fruits, the streams and the river itself teemed with fish, and the reeds along the bank hid flocks of swan, geese and ducks. However, it was the open space that drew Cadillac's closest interest."[2]

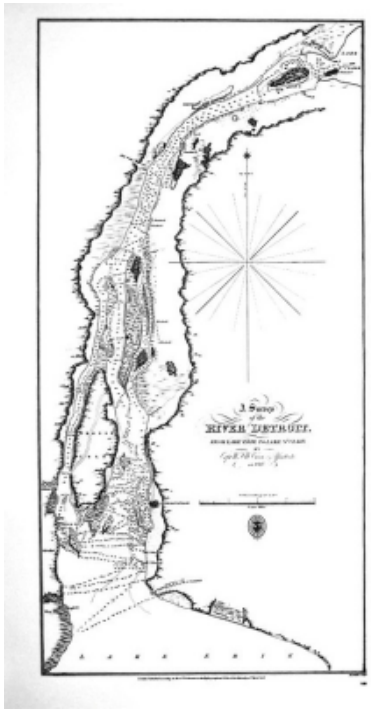


Figure 1.1 *(Top)* 1815 Survey of "The River Detroit from Lake Erie to Lake St. Clair"
Figure 1.2 *(Bottom)* Fort Pontchartrain Du Detroit

In the years following, Fort Pontchartrain became a successful fur trading hub with farming and native settlements surrounding the fort. It was 1751 when the settlement was renamed to Fort Detroit. Throughout the 1700s the French and British would meet many times in battle although the fighting was always far from Detroit. That changed in 1760 when Fort Detroit was taken by British soldiers, three years later the Treaty of Paris was signed, and the fighting ended.[3]

Detroit would remain a fur trading hub under British control until eventually the American Revolution came to the area. It was July 11, 1796 when the Americans evicted the British. Detroit was now a part of the United States of America, although with the British settlers gone, the population fell from nearly 2,300 to roughly 500.[4] Although the settlement had changed hands several times over the 100 year span since Cadillac's arrival, the fort itself had remained more or less the same. In the summer of 1805, this would change when a fire burnt the fort to the ground.

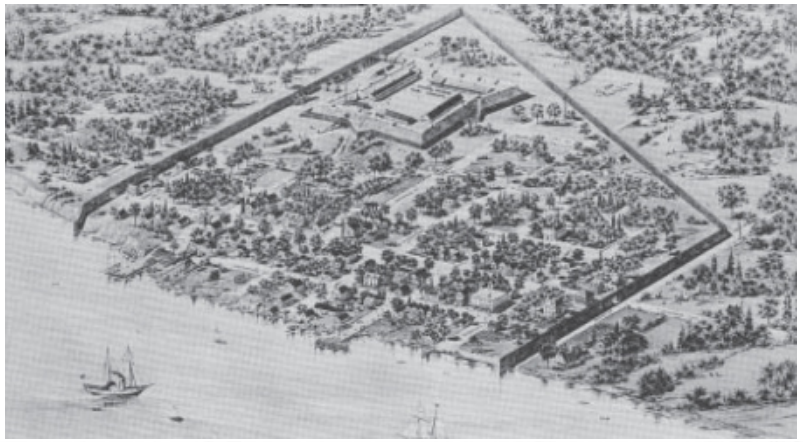


Figure 1.3 *(Top)* Bird's eye view of Detroit in 1818
Figure 1.4 *(Bottom)* Painting of Detroit shoreline in 1794

Shortly after the fire, Augustus Woodward was sent from Washington to rebuild the city. His idea was to lay out the streets in a pattern of circular parks with intersecting spokes that would form the city grid.[5] Although much of Woodward's plan was never implemented, the city grid, at least in the downtown core, was built and still stands today.

At this time, Detroit was a small town without many people coming to the city, somewhat due to the turmoil of the war of 1812 and partly because Detroit was difficult to get to from the southern states. This hurdle was cleared when the Erie Canal was completed near around 1825. The 363-mile waterway from Albany, New York to Buffalo made it possible to travel from New York to Detroit in five and a half days. With the help of the canal Detroit transitioned from a small fur trading town into a gateway to the West. The population began to grow quickly as Hundreds of people each day were now traveling through Detroit, and many artisans began to set up shop. By 1850, Detroit had over 21,000 residents; this number would double again to 40,000 over the following 10 years.[6]

As Detroit continued to grow and take on the characteristics of a larger city in the years leading up to the Civil War, a strong anti-slavery movement began to take root. Although there had been no slaves kept in Detroit since becoming an American city, many escaped slaves would come to Detroit in hopes of reaching Canada. Detroit became an important last stop for slaves being transported on the Underground Railroad. An estimated 50,000 African Americans came through Detroit between 1830 and 1860.[7]

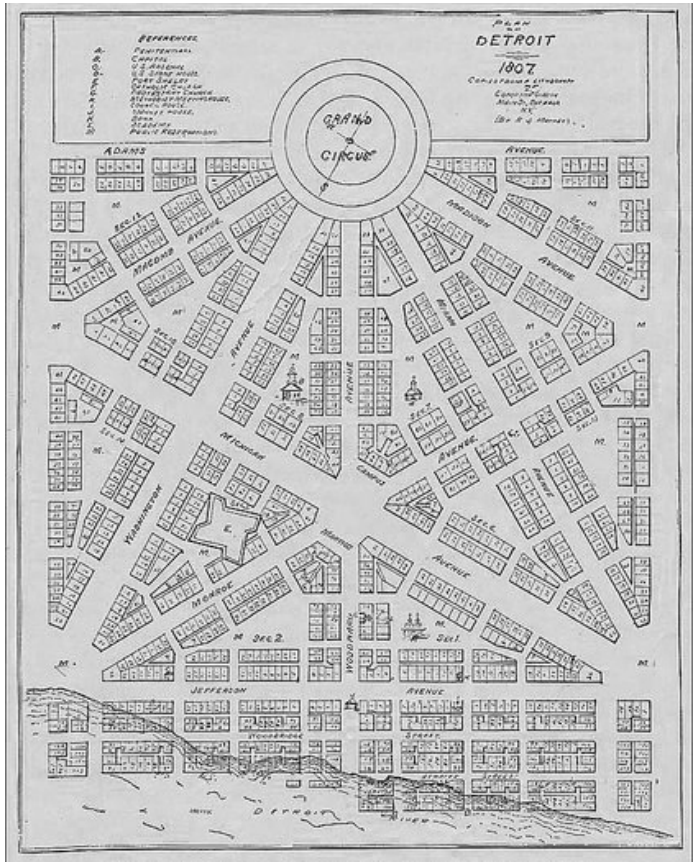


Figure 1.5 *(Above)* Augustus Woodward's plan for Detroit following the fire of 1805

The First Signs of Industry in Detroit

It was well known by the original French settlers that the great lakes region was rich in natural resources such as iron, copper and lumber. These resources would be the foundation for the Industrial Revolution that would define Detroit for many years. When the means to extract, refine and transport these metals became more available, Detroit was transformed into an industrial center where railroad cars and tracks, ships, engines and saw mills were manufactured. With natural resources and ease of transportation to major cities that Detroit offered, many other successful industries began opening factories in Detroit around the time of the Civil War, these included: steel stoves, drugs, paints, soaps, shoes, seeds, and tobacco. [8]

Figure 1.6 *(Above)* Bird's eye view of Detroit in 1890

With so many factories opening in Detroit the need for a labour force began to grow. Looking for a way to escape disease and political unrest in their native countries, immigrants from Germany, Ireland and Poland came in droves, settling in areas near the factories. This influx of residents pushed the population of Detroit in 1880 to 116,340, and by 1890, the City had 205,876 residents.[9] Detroit's population had doubled every ten years since the Erie Canal opened in 1825. Throughout this time of growth, city limits continued to expand outwards. Detroit was somewhat unique in that north of the River, there are no geographical obstacles forcing the city to grow vertically (such as in New York for instance). There was a lot of room to expand outwards and for each family to own a single detached home.[10] This tread would continue on into the 1900s. The following are comments from Robert Woods of Joliet, Illinois who visited Detroit in the 1880s:

Detroit is the handsomest city in the world…Its handsome boulevard, bordered green grass plots fringed with beautiful flowers and canopied with the foliage of contiguous trees, its electric towers with their solver light; its broad deep river, its charming suburbs and numerous retreats for pleasure and recreation, and above all the spirit and disposition of its people combine to make it an attractive and desirable place of residence or for business.[11]

Figure 1.7 *(Above)* Bird's eye view of Detroit in 1889

The Motor City

While Henry Ford and Charles B. King invented the first Automobile, it was Ransom E. Olds who was the first to build in Detroit. However, the first Oldsmobile was too expensive for the average person, and production was slow. Prior to 1903, Henry Ford was more interested in racing his inventions than building them. Finally, Ford decided to mass produce his idea for a new car and try to compete with Oldsmobile. "Ford's idea was to build a car that would provide basic transportation for farmers and small-town residents as well as for city dwellers. He envisioned a mass-produced, low-price automobile so simple in construction that any handyman could repair it."[12] The general public began making orders right away, and it wasn't long before Ford had orders coming in faster than his team could build. Furthermore, the assembly line was introduced in 1913. This automatic system lowered the cost of building his cars dramatically, and Ford was able to pass on the savings to the consumer, lower the cost of a Model T Ford by 60%.[13]

Ford eventually made the decision to offer $5.00 a day to an assembly line worker to build cars. People from across the country lined up outside the factory in Highland Park, skilled and unskilled workers alike.[14] In 1920, Ford grew to employ approximately fifty-six thousand workers.[15]

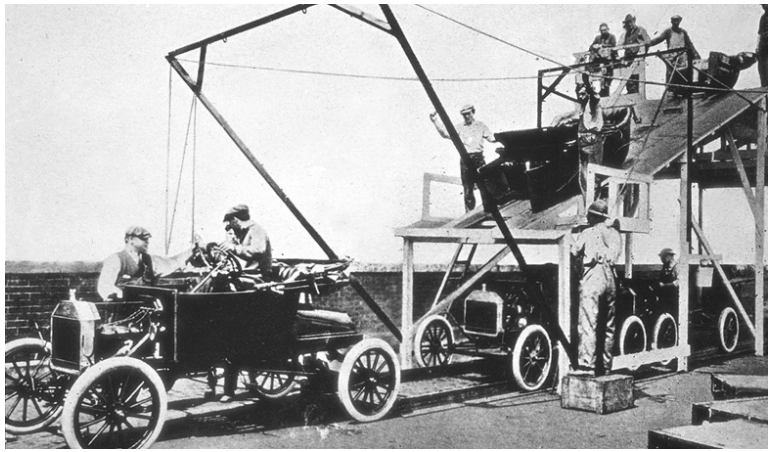


Figure 1.8 (*Above)* the first moving assembly line at Henry Ford's auto factory

Rival automotive companies began setting up in the city as well during the early 1900s. In order to compete with Henry Ford's booming business, team-ups, take-over and buy-outs were common among the smaller companies. In 1908, William C. Durant formed the General Motors Company buying out Cadillac, Oldsmobile, Oakland and several other smaller companies with Chevrolet joining later. Finally, it was in 1925 that Walter P. Chrysler entered the industry, forming the last of the Big Three car companies.[16]

Alongside the rise of the automobile assembly factories was the rise of the parts and accessories industry. The car companies offered large contracts for these smaller factories to manufacture the more intricate pieces of a car. As more and more factories popped up in the city and surrounding suburbs, the need for skilled labourers continued to fuel the growing population in Detroit. "By 1917, Detroit had twenty-three automobile companies providing jobs for almost 93,000 and 132 parts firms employed an additional 44,000 workers."[17]

Figure 1.9 *(Top)* America's first suspended traffic light
Figure 1.10 *(Bottom)* The first Chevrolet car, manufactures in 1912

The First and Second World Wars

The First World War official began in Europe in 1914, and the United States joined to war effort against Germany in 1917. Because of the unmatched industrial base, Detroit's manufacturing companies were given national defense contracts to produce war materials for the troops. Factories all over the city halted production of consumer goods and instead focused on turning out a variety of military equipment, including: guns, ammunition and helmets.

The rate at which these materials needed to be shipped to the East Coast proved to be too fast for congested railroads and waterways. This necessitated the introduction of the tractor-trailer, forever changing the way manufactured goods were shipped. This new efficient way of shipping was put to use after the war when the factories went back to business as usual and allowed for an increase in production from the auto companies. [18]

The First World War did nothing to slow Detroit's population growth and the City's distinct trend of nearly doubling the population every ten years continued. In 1900, the population stood at 285,704 people, in 1910 it was 465,766 and in 1920 the population was 993,678.[19]

Figure 1.11 *(Above)* Doughboys of the 2nd Battalion, 128th Infantry, 32nd Division

Detroit's economy and population continued to grow during the 1920s and with it, the borders of the city. After the First World War, many of the people who had come to work in the war effort decided to stay and build cars for a living. In a town where almost every family owned a car; Detroit still embraced the ability to grow outwards instead of vertically, and giving each factory worker room for a single-family home. In 1926, the last major annexation occurred, giving Detroit a total land area of 139 square miles. [20]

After the stock market crash of 1929 and the onset of the great depression, Detroit's economy stalled along with the rest of the country. According to Arthur M. Woodford, "It has been estimated that perhaps one-third of all those employed in Detroit were working only part-time. All told, 223,000 workers were jobless by 1932.[21]

The depression lasted until America joined the Second World War in 1941. Members of Detroit's labour force that were not drafted into the war were all called back to work at the factories for wartime production. The Second World War lasted longer and was more brutal than the first and Detroit's factories needed more labourers to produce the required armaments. In order to fill the vacancies, the manufacturers brought in women to work on the line. As it turned out, women could do the job just as well as any man, and even after the war many women remained in the labour force. Additionally, it is estimated by Arthur M. Woodford that, "between 1940 and 1943 more than 50,000 blacks from the south and 200,000 whites from West Virginia, Kentucky, and Tennessee migrated to Detroit to work."[22] This latest, and last, insurgence of southern Americans into the Detroit labour force pushed the City's population to roughly 1,900,000 people in the early 1950s.

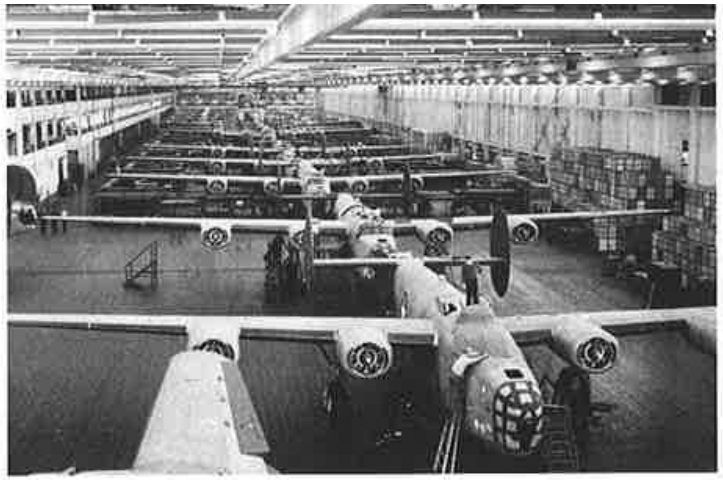


Figure 1.12 *(Above)* B-24 Bombers assembly plant in 1942

End Notes

[1] Richard Bak, *Detroit: Across Three Centuries* (Chelsea, Mi.: Sleeping Bear Press, 2001), pg 13
[2] Scott Martelle, *Detroit: a biography* (Chicago, Ill.: Chicago Review Press, 2012), pg 3.
[3] Ibid, pg 7
[4] Richard Bak, *Detroit: Across Three Centuries* (Chelsea, Mi.: Sleeping Bear Press, 2001), pg 24
[5] Ibid, pg 26
[6] Scott Martelle, *Detroit: a biography* (Chicago, Ill.: Chicago Review Press, 2012), pg 33
[7] Richard Bak, *Detroit: Across Three Centuries* (Chelsea, Mi.: Sleeping Bear Press, 2001), pg 40
[8] Arthur M. Woodford, *This is Detroit, 1701-2001* (Detroit, Mi.: Wayne State University Press, 2001), pg 77-82
[9] Ibid, pg 86-87
[10] Richard Bak, *Detroit: Across Three Centuries* (Chelsea, Mi.: Sleeping Bear Press, 2001), pg 44
[11] Ibid, pg 44
[12] Arthur M. Woodford, *This is Detroit, 1701-2001* (Detroit, Mi.: Wayne State University Press, 2001), pg 89-92
[13] Ibid, pg 94
[14] Ray Batchelor, *Henry Ford: Mass Production, Modernism and Design* (Manchester NY.: Manchester University Press, 1994), pg 22
[15] Arthur M. Woodford, *This is Detroit, 1701-2001* (Detroit, Mi.: Wayne State University Press, 2001), pg 94
[16] Ibid, pg 95-96
[17] Ibid, pg 97
[18] Jason Booza and Kurt Metzger, "On Some Socio-Economic Aspects of Detroit," *Shrinking Cities: Detroit III Working Paper*, p.45
[19] Arthur M. Woodford, *This is Detroit, 1701-2001* (Detroit, Mi.: Wayne State University Press, 2001), pg 106
[20] Ibid, pg 105
[21] Ibid, pg 121
[22] Ibid, pg 156

The Abandonment of Detroit

Decentralization of the City Core

"The best years of our American lives were precisely when the mechanisms for abandoning our cities were put in place."[1]

Jerry Herron, "The Forgetting Machine: Notes toward a History of Detroit" (2012)

While Detroit's population did not peak and begin to fall until the early 1950s, many of the pieces that would siphon people from Detroit to the suburbs were already in place. Since the first population spike in 1825, Detroit had always expanded outwards from the city core, building rows and rows of single-family homes. This trend would have continued beyond the present-day city limits had the state not prevented further annexation in 1926. Throughout World War Two, as the population grew, the city began to feel crowded and the roads were terribly congested. Decentralization (redistribution of population and industry to suburban areas), first began with the auto factories.

During World War Two, the federal government invested heavily in the building of new factories in Detroit, but it was mandated that the factories be spread out, far apart in case of a nuclear strike. This was just as well because there were no plots of land in the City large enough to build on anymore. These factors forced the auto industry to build on land outside the city in suburban towns.[2]

The 1956 Interstate Highway Act

With auto factories now established outside the city, many residents found themselves caught in the middle, having to travel one way to work and the opposite to downtown, the business and entertainment center, all while battling heavily congested roads. Life went on like this, with the City struggling to find ways to move massive amounts of people around the city in a cost-effective manner. When the federal government introduced the 1956 Interstate Highway Act, offering to cover 90% of the costs of building highways, the City jumped on board right away. More than 256 miles of highway was constructed in Detroit between 1950 and 1981.[3]

With the new highways traveling to the suburbs became extremely convenient. “Cheap rural land along the beltways became the favored sites for new suburban housing, shopping malls, industrial parks and office parks.”[4] Meanwhile inside the city, neighbourhoods had been destroyed by the construction; many houses were cleared away while the rest were cut off from each other and from downtown.

Federal Housing Administration mortgage financing and subdivision regulation

While the decentralization of the auto industry gave a reason for people to leave the city and the highways gave people the means to get there, it was the Federal Housing Administration (FHA) that created suburbia. It was the early 1940s when the FHA began backing long term, low-interest loans for the middle class. This new type of loan allowed for smaller down payments and lower monthly bills for homeowners. This meant that middle-class workers could now afford bigger houses than you would typically have found in the City. Additionally, the FHA only insured these loans for new houses built in the suburbs and not older homes like the ones in Detroit. For most people the choice between an older, smaller house and bigger, newer house that is closer to work, is an easy one.[5] The allure of the "American Dream" is ultimately the reason Detroit has suffered so much lost population.[6] "Racism and deindustrialization may have propelled many people to the suburbs, but once there, they found a new landscape that exerted a grip all its own."[7]

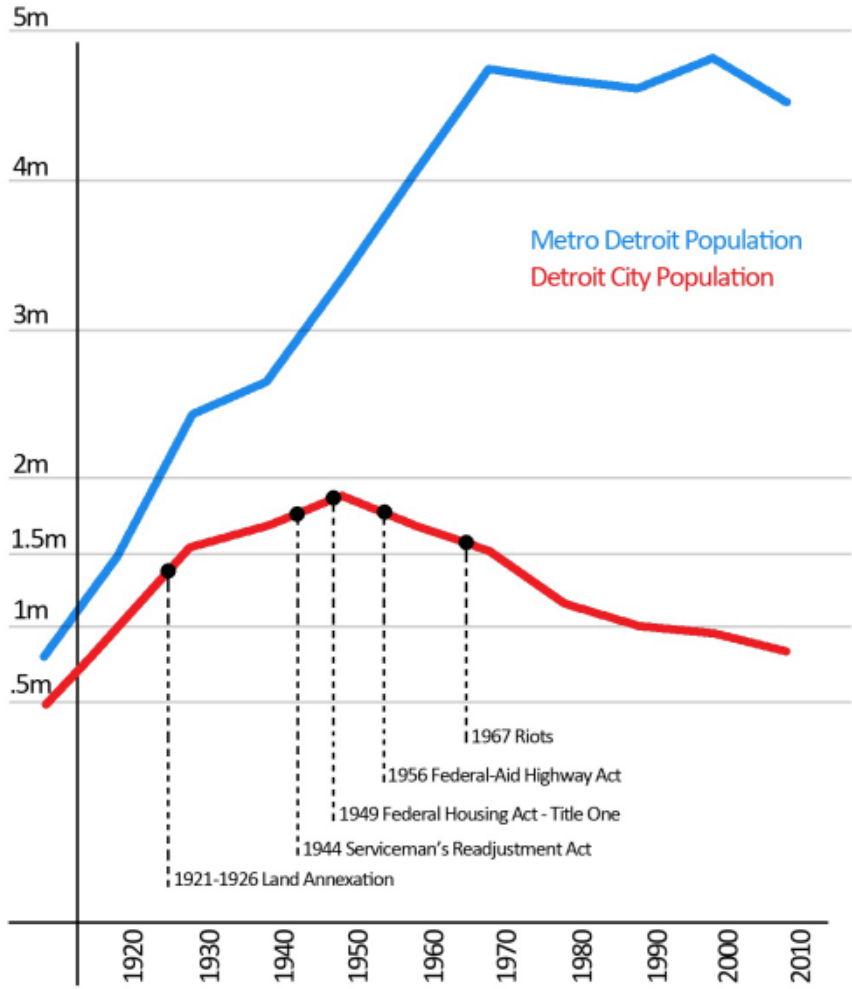


Figure 1.13 Detroit City population vs. Metropolitan Detroit from 1920 - 2010

Racial Segregation and Riots

The other caveat found in the FHS's attempt to regulate the emerging suburbs was the decision only to offer insurance on these new loans to white families. Long-term, low-interest loans were not made available to black families until the mid 1960s. This decision facilitated what is commonly referred to as "white flight," where white families moved to the suburbs while black families were forced to stay in the City.[8]

Racial segregation had always been a reality in Detroit, only heightened by the influx of southern Americans during the Second World War. Black families were forced to live in poor and crowded neighbourhoods, and the strife had reached the first boiling point in 1943. The first of two riots that would tear the City apart cost millions of dollars in property damage, 1800 arrests and 34 deaths.[9] The second time the city erupted into a mob was in 1967. This riot lasted nearly five days, and in the end, the cost was tremendous; 44 people were killed, there were 7,331 arrests, 1600 fires were reported and damages totaled more than $50 million.[10]

When the white population closest to black neighbourhoods began moving to the suburbs, this opened up the opportunity for black families to move into the discarded houses, in turn driving more white families to the suburbs. Slowly, but surely the black population grew in percentage and overall numbers. In 1950, 16.3% of Detroit's population was Black or African American; in 1970, it was 43.7%.[11] In 2010, 84.3% of the population in Detroit was Black or African American.[12]

Urban renewal programs – 1949 housing Act

When the 1949 Federal Housing Act was passed, Detroit's population was still peaking. The Act sought to provide "a decent home and suitable living condition for every American." A noble goal to be sure, but the way in which the government sought to achieve this goal did more harm than good. The Act, also known as Urban Renewal, focused on the razing of the most blighted areas of the city and building new high rise residential towers. This initiative removed some of the worst slums found in the City, but some very close knit communities were also leveled. In the best cases, the residential towers were built but could not be filled up with residents, and the vibrant street life that once kept the neighbourhood together could not be replaced. In the worst cases, the razed neighbourhoods would remain vacant for decades at a time.[13]

While the city residents became accustomed to vacant land in the neighbourhoods of Detroit, the urban renewal programs also had an impact on the downtown core as well. The idea here was to remove blighted structures downtown and replace with middle class high-rise apartments. However, this came at time when people were enamored with the idea a single-family home, like the ones found in the suburbs. With highways beginning to converge on downtown, Detroit's politicians hoped that by making the downtown automobile friendly these middle-class apartments could hope to compete with the suburbs. Not only did the bid to attract middle-class families fail, but now the downtown had become a pedestrian-unfriendly area filled with parking lots, highways and isolated buildings.[14]

Economic Recessions and job loss

During the 1970s and 80s, whilst battling a falling population, rising crime rates and general social unrest following the 1967 riots, the nation began to fall into a series of economic recessions that would wreak havoc on Detroit's auto industry and further decimate the City's fragile social infrastructure. The collapse of the auto industry began when a combination of factors converged in the early 1970s. The popularity of outsourcing jobs and capital to non-unionized and low wage areas of the world began to grow in American industry at the same time that foreign car companies began to offer competitive options for stateside consumers. American auto companies were still making big, heavy cars with low fuel economy. In 1973, the price of oil skyrocketed due to an embargo of oil from the Middle East and gas prices rose 300%.[15] With all these factors combined, the auto industry was in trouble. As sales began to fall, he Big Three car companies were forced to lay off thousands of workers. After a second recession hit in 1979, it is estimated that Detroit lost 208,000 jobs during the 1970s.[16]

While the 1990s are viewed as a period of short-lived recovery with several downtown projects bringing new life and income to the city core, the residential neighbourhoods surrounding downtown continued to decay and crumble. The auto industry and economy in Detroit never fully recovered and was dealt another blow in 2008 when on top of a national housing crisis, all three American auto companies nearly fell into bankruptcy. In 2009, Detroit's official unemployment rate was 20.9%, however many news outlets grabbed onto a quote from Detroit's Mayor Dave Bing stating that Detroit's unemployment rate was "probably close to 50%".[17]

End Note

[1] Jerry Herron, "The Forgetting Machine: Notes Toward a History of Detroit," *The Design Observer,* http://places.designobserver.com/feature/the-forgetting-machine-a-history-of-detroit/31848/ (accessed January 22, 2012).
[2] Philipp Oswalt, *Shrinking Cities, Volume 1: International Research* (Germany: Hatje Cantz, 2005), p.68
[3] Arthur M. Woodford, *This is Detroit, 1701-2001* (Detroit, Mi.: Wayne State University Press, 2001), pg 163
[4] Robert Fishman, "The American Metropolis at Century's End: Past and Future Influences," Shrinking Cities: Detroit III Working Paper, pg 20-21
[5] Ibid, pg 22
[6] Philipp Oswalt, *Shrinking Cities, Volume 1: International Research* (Germany: Hatje Cantz, 2005), p.69
[7] Jon Gallagher, "Detroit," Shrinking Cities: Detroit III Working Paper, pg 43
[8] Robert Fishman, "The American Metropolis at Century's End: Past and Future Influences," Shrinking Cities: Detroit III Working Paper, pg 22
[9] Arthur M. Woodford, *This is Detroit, 1701-2001* (Detroit, Mi.: Wayne State University Press, 2001), pg 158-159
[10] Ibid, pg 181
[11] Ibid, pg 164
[12] U.S. Census Bureau (2010), "The Black Population: 2010"
[13] Robert Fishman, "The American Metropolis at Century's End: Past and Future Influences," Shrinking Cities: Detroit III Working Paper, pg 23
[14] Ibid, pg 23
[15] Arthur M. Woodford, *This is Detroit, 1701-2001* (Detroit, Mi.: Wayne State University Press, 2001), pg 223
[16] Ibid, pg 224
[17] "Detroit's Unemployment Rate Is Nearly 50%, According to the Detroit News." *The Huffington Post*, March 18, 2010.

The Detroit Public School Crisis

Mirroring the rise and decline of Detroit as a whole, the Detroit public school board faced many similar problems throughout the 20 century. Explosive growth in population causing a scramble to accommodate students perpetuated bad decision making and conflict, setting the stage for a prolonged period of decline, punctuated by corruption and extreme deficits.

With Detroit's population growing so rapidly the number of school-aged children in the city grew from 29,401 in 1900 to 115,389 in 1920, outpacing the general population increase in the same time period.[40] Managing such a dramatic increase with limited funds and without impacting the students would be a challenging task for anyone. Over time, the perceived mismanagement by the school board fueled critic's accusations and moved the more powerful citizens of Detroit to take action.

In the years between 1902 and 1916, a political battle was waged for control of Detroit's school board. The existing ward based board of education, which consisted of an official elected from each of Detroit's twenty-one wards, was very large and considered inefficient. However, the main issue was that many of these officials were middle class men. During this time period, a group of Detroit's upper class men staged a smear campaign calling into question the character of the middle class board members.

Figure 1.14 *(Above)* Central High School, Detroit, Michigan.

This campaign was almost entirely based on class warfare. In fact, both parties agreed on the board's agenda and most everything that was proposed and implemented. "The conflict in Detroit centered almost entirely on who should rule, not on specific policies or practices."[41]

The wealthy reformers proposed a new system to govern the schools, a small council of officials elected by the city at large rather than in each ward. If the reformers could get this system in place it would be difficult for a middle class man to fund a city-wide campaign, giving the rich citizens an upper hand in board elections. With the population continuing to grow and the problem of too few buildings, and staff to accommodate, obvious to everyone, the voters in Detroit decided it was time for a change and in November of 1916, the small council system took over.

After the creation of the small council, the focus was turned to providing a good education to the youth of Detroit. The 1920s were a time of great growth in Detroit, and many strides were taken to improve education during this time. However, with the population continuing to grow, the board of education could still not keep up with the number of school-aged children. The teacher and building shortages only became worse through the 1940s.[42]

Throughout the Great Depression and World War Two, the school board fought to finance the expansion needed to support the population, but funding continually came up short. By the mid 1940's the teacher's union began battling with the board for an increase in salaries. Meanwhile, the city continued to deny an increase in funds, citing a decrease in enrollment, and suggested that the money was simply being mismanaged. In truth, the cause was the ever expanding layout of the city and the spreading out of citizens. So although the overall number of students decreased, new schools were needed in new neighbourhoods that did not exist before.

Further fueling the financial peril, the school system was facing the arrival of the baby boomers. Massive increases in enrollment across the nation were finally able to convince officials to raise taxes for the school system. At this point, the notion of increased taxes was a foregone conclusion; the question was how much? While suburban districts were able to increase their funding dramatically, Detroit board members opted to go with a smaller increase in taxes effectively hanging the school children out to dry as it quickly became apparent that the amount raised was inadequate. Jeffery Mirel suggests this move was a bid to gain support from the tax base and voters, which if true seemed to work perfectly.[43]

Detroit's struggles with segregation and race also played a significant role in the decline of the public school system. Again, mirroring the city as whole, as white families fled the city and taking their children with them, the school system saw a shift in majorities from white to black, resulting in an increase in violence within the schools. Private schools began to rise in popularity amongst white families, who then voted against tax increases for public schools, making it even more difficult for the public board to raise funds.[44] During the late 1960s and 1970s, seeing the shift in majority voting power, young black militant's began leading campaigns against the school board with accusations of racism and corruption. They began promoting decentralization as a means to return the power to govern the schools to the now mostly black population of Detroit and other central cities. Detroit and New York were the two cities that voted to decentralize their school systems.[45]

Throughout the 70s and 80s, it became apparent that decentralization did not help test scores, drop-out rates or alleviate the financial burdens of decades past. In fact, the financial deficit only increased, largely due to the ability of the teachers union to gain leverage over the untested system. The teachers began to organize strikes and demanded increased salaries and more power in budget and curriculum discussions. [46]

Regardless of all the political controversy surrounding the public school system, the single biggest factor in the decline of urban public schools in Detroit was the declining enrollment. With the population of the city in steady decline, funding was taking a hit with every student who was pulled out of the system. The increase in violence and dropout rates and the constant bickering of school officials became just another reason for families to leave the city for the suburbs. With declining enrollment and a lack of funds for repairs, school building began to fall into disrepair and the number of school closings began to climb.

For decades now, the turmoil found in inner-city public schools has been a major burden on the city of Detroit and a deterrent for families looking for a place to settle in Michigan. Where schools were once a symbol of hope for future prosperity through higher learning, schools in Detroit, whether in operation or abandoned, now represent a failure of the Detroit collective throughout the last six decades. Detroit is now home to 82 abandoned schools **(see appendix A)**, each one a burden on the neighbourhood, **(Figure 1.17).** Although many schools have been torn down, these schools remain standing with a for-sale sign indicating the board will consider any sincere offer for purchase or lease.

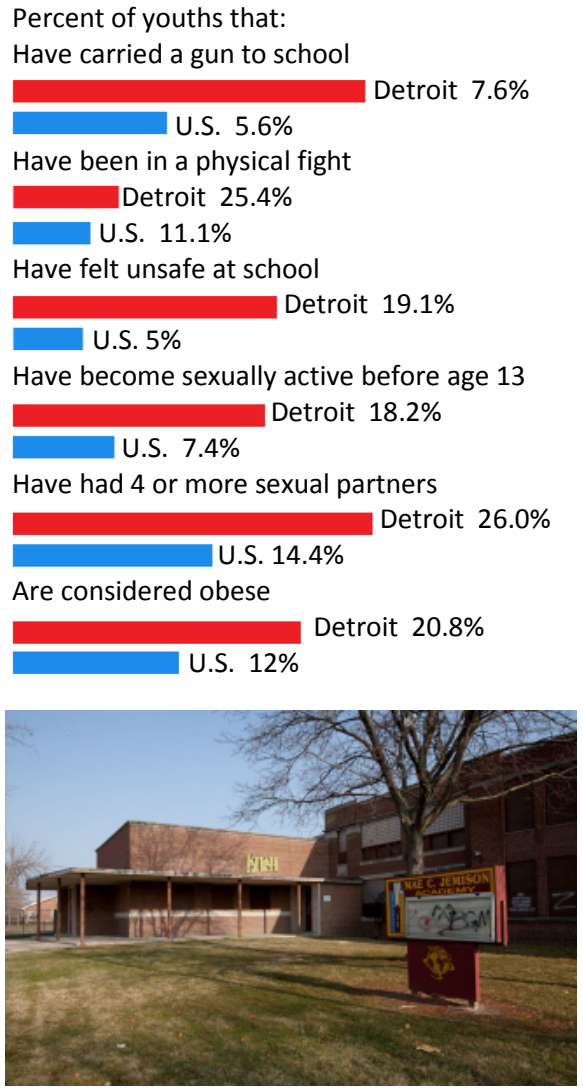
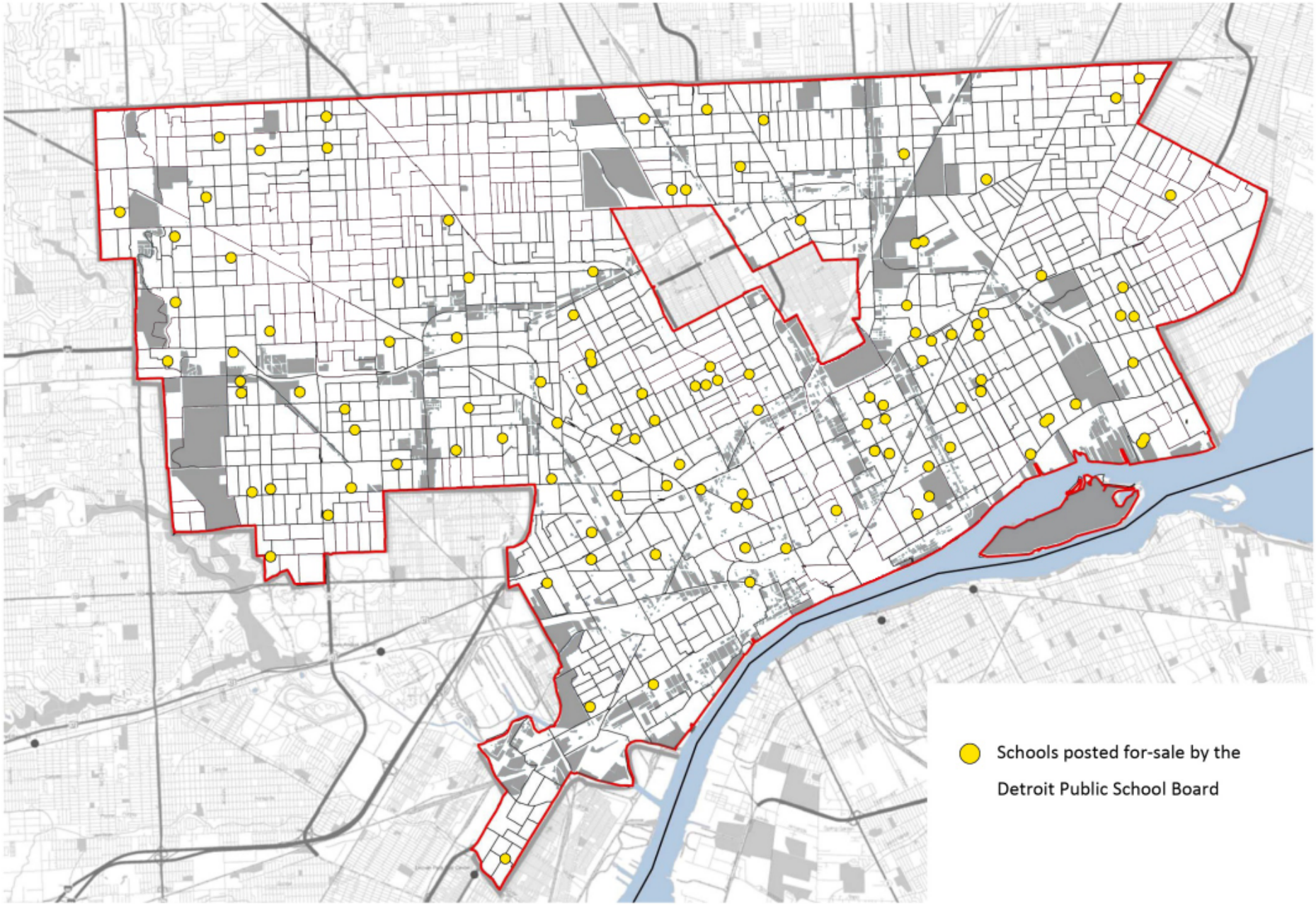


Figure 1.15 *(Top)* 2009 Youth Behavioral Risk Survey Data.
Figure 1.16 *(Bottom)* Abandoned school in Detroit.
Figure 1.17 (*Opposite)* Schools for-sale in Detroit.


Schools posted for-sale by the
Detroit Public School Board

End Notes

[40] Jeffrey Mirel, *The rise and fall of an urban school system: Detroit, 1907-81. 2 ed.* (Ann Arbor, Mi.: University of Michigan Press, 1993), pg 3
[41] Ibid, pg 9
[42] Ibid, pg 152
[43] Ibid, pg 231
[44] Jeffrey Mirel, William Galston, James Guthrie, "*Urban public schools in the Twentieth Century: The view from Detroit," Brookings Papers on Education Policy* (Brookings Institution Press, 1999), pg 29
[45] Ibid, pg 31
[46] Ibid, pg 32

Part 2: Context Study

The Detroit Works Project

In November 2009, Dave Bing was elected mayor of Detroit. After the election, he began promoting his ideas for reshaping the city by evaluating and reorganizing city departments and then doing the same with the city at large. This plan was introduced to the public in March of 2010 as *The Detroit Works Project*.[1]

After decades of the city being in decline, citizens and city officials were beginning to understand and accept that at this point population growth was not a practical goal. Rather it is time to ensure the people who plan on staying are able to live in a city that is safe, healthy, efficient, and stable. In order to achieve this, the *Detroit Works Project* has put an emphasis on consolidation. Consolidating assets, such as citizens and vacant land, is a key strategy for the Detroit policy makers.[2]

Phase 1: In-depth Analysis

In-depth Policy Audits have been completed by Hamilton Anderson Associates; a third party firm hired to dissect the city. The final drafts of the policy audits were released in February 2011. They cover a range of topics, including: public land disposition, urban and regional economy, urban agriculture, neighbourhood and community development, landscape ecology, land-use and urban form, environmental remediation and health, and city systems – infrastructure, transportation and sustainability.

In addition to the policy audits, a large part of the fact gathering process has been to get as much feedback from the public as possible. Corruption in City departments has been a hot-button issue in Detroit in the last few years. Mayor Bing has made transparency a priority in the Detroit Works Project. Several community forums were held in early 2011. Citizens from all over Detroit attended to give their input on the situation in their own neighbourhoods.

The neighbourhood, community development and housing policy audit provides a clear picture of the existing conditions in the city by mapping population demographics, vacancy, density, and housing market statistics. This information will inform the decision-making process going forward.[3]

Figure 2.1 *(Above)* Ambassador training session

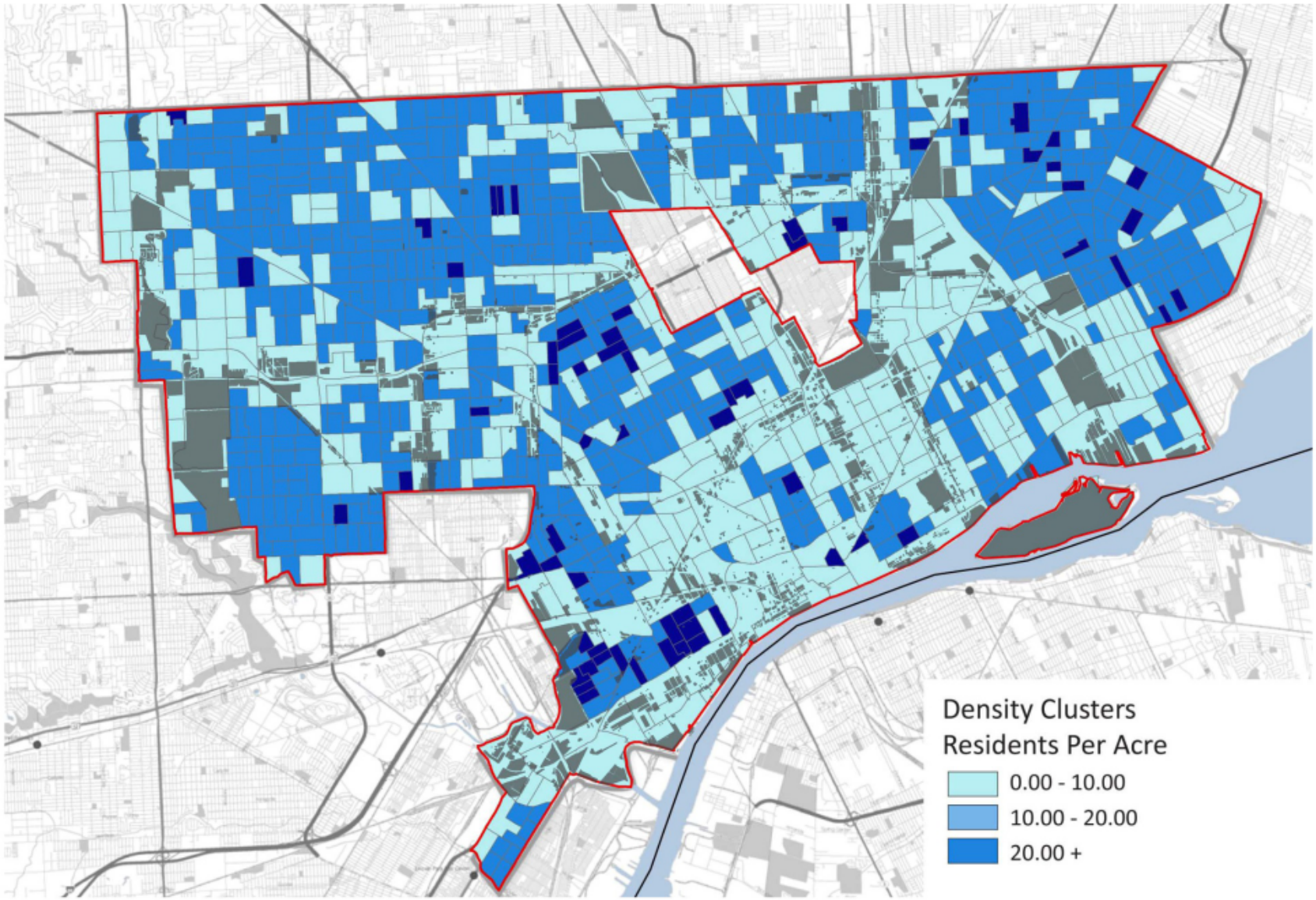
Population Density

Figure 2.2 is a map of Detroit showing density clusters from the neighbourhood, community development and housing policy audit. This map shows the number of residents in the city per acre. From this map, we can begin to see where concentrations of population remain in the city and which neighbourhoods need to the most amount of work.

The grey shaded areas represent industrial zones. It is clear that the neighbourhoods adjacent to industrial areas were affected the most by the declining population. As the city was growing during the early 20th century, industrial corridors were established on the city fringe creating a series of rings expanding out from downtown. Over time, as residents began to leave the city, a semi-circle of vacancy was formed surrounding the downtown core.

These residents fell into the category of people caught in the middle between downtown and the suburbs, where many manufacturing jobs relocated to. Additionally, these houses were built during the massive construction boom of the 1920s and over time had begun to deteriorate. Countless demolitions of homes have opened up the landscape in this middle ring, leaving desolate, unmaintained neighbourhoods that seem to be moving backwards in time.

Figure 2.2 *(Opposite)* Map of Detroit showing density clusters in the City.

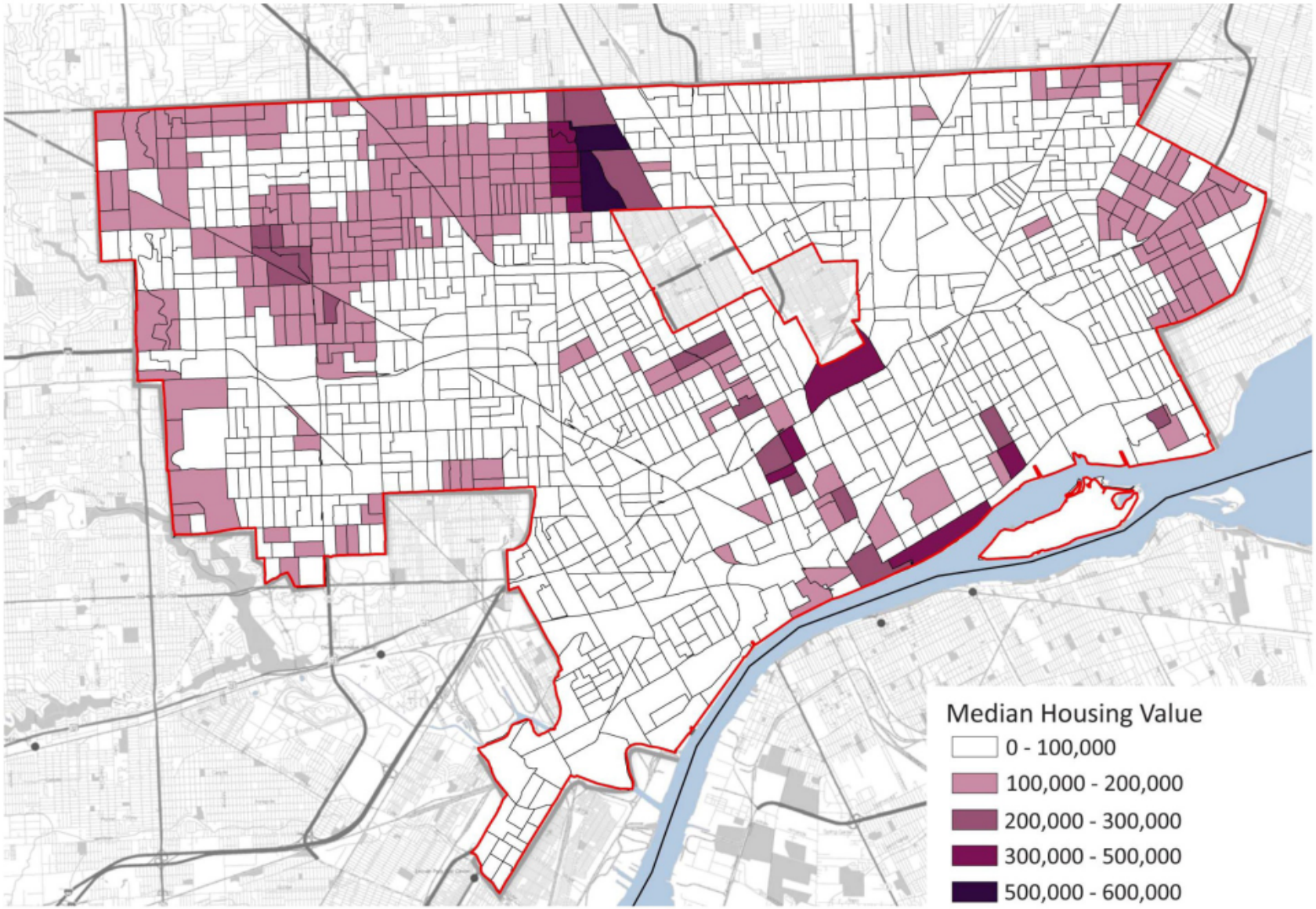

Density Clusters
Residents Per Acre
0.00 - 10.00
10.00 - 20.00
20.00 +

Median Housing Values

To this day, the desolate middle zone in Detroit has not been entirely abandoned. There are still some home owners who remain in even the most empty neighbourhoods, despite in some cases, owning the only standing structure on their block. These residents are remnants of the once populated streets of old Detroit. They have lived through the decline and still work to maintain their own homes during these trying times. This is admirable considering the mountain of deterrents that affect these neighbourhoods.

The vast emptiness and abandonment allows criminals and vagrants to roam the neighbourhoods largely unchecked. Empty homes provide havens for drug dealers, gang members and rapists. Abandoned schools combined with the lack of amenities such as grocery stores have left little incentive for anyone to move into these areas of the city. **Figure 2.3** is a map showing the median housing values found across the city. Homes within the desolate middle ring are valued hopelessly low. Even residents who work hard to maintain their homes in good condition have little hope of selling at a price high enough to afford even a down payment on a suburban home.[4]

Figure 2.3 *(Opposite) Map* of Detroit showing median housing values of homes in the City.

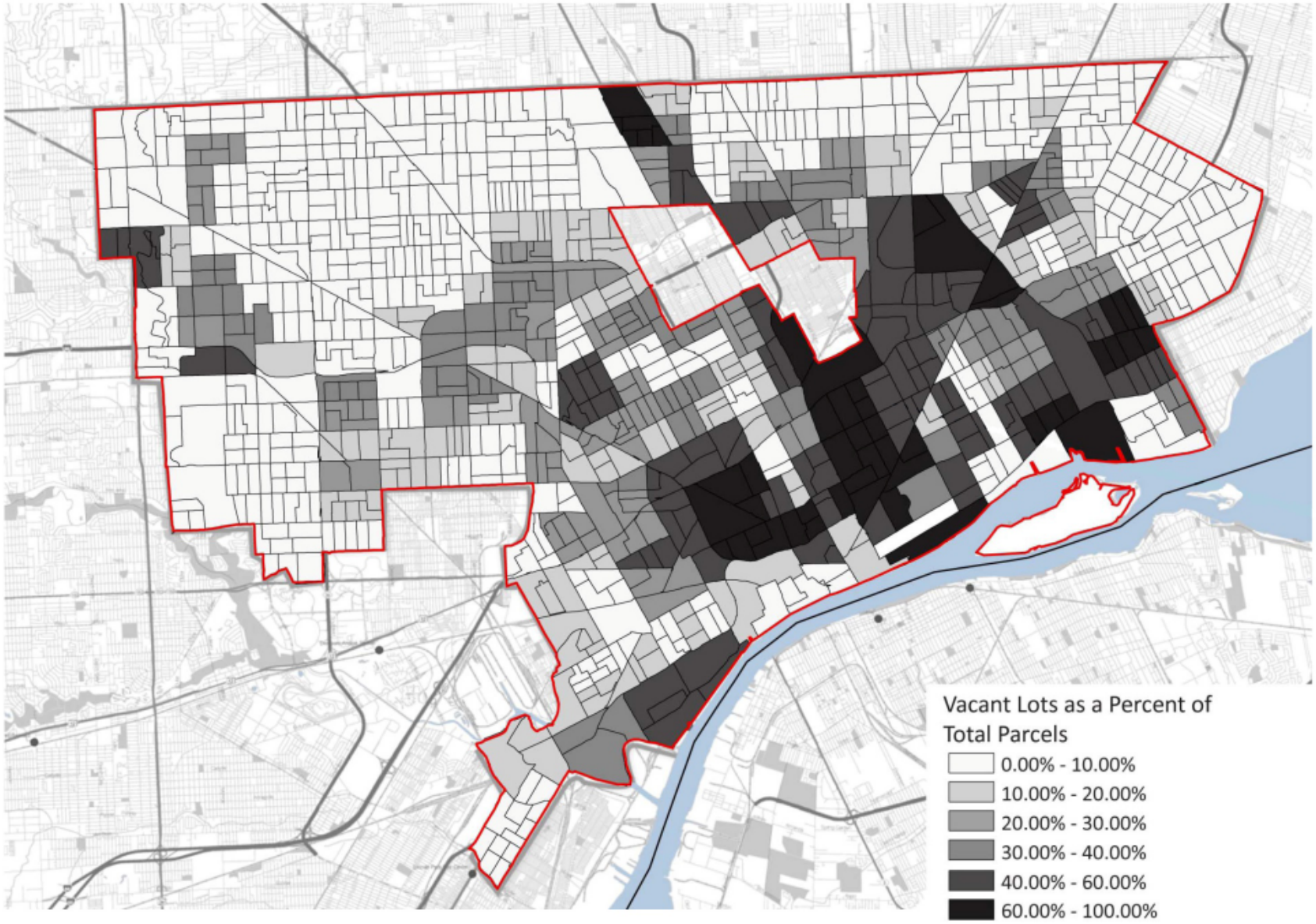

Median Housing Value
0 - 100,000
100,000 - 200,000
200,000 - 300,000
300,000 - 500,000
500,000 - 600,000

Vacancy

The neighbourhood, community development and housing policy audit also contains the map shown in **Figure 2.4.** This map shows the concentration of vacant lots in the city and further reinforces the dire situation in Detroit's middle ring. It is estimated that roughly 40 square miles of Detroit is vacant land. That equates to nearly 30% of Detroit's 139 square mile area.[5]

When a home or lot is abandoned, that lot is no longer contributing tax money to the city of Detroit, however, services such as garbage collection and police patrols are still needed to service the remaining residents. Detroit was built to accommodate nearly 2 million residents. With less than 800,000 remaining, the City is struggling to pay for these services with the eroded tax base leaving no money in the budget to make sweeping changes to the infrastructure. This is the challenge that Detroit's policy makers now face. One question is what to do with all of the empty land? Another question is how better to concentrate services in the city to increase the quality of life for residents and to make sure that no one is left out.

Figure 2.4 *(Opposite)* Map of Detroit showing vacancy in the middle ring of the City.


Vacant Lots as a Percent of Total Parcels
0.00% - 10.00%
10.00% - 20.00%
20.00% - 30.00%
30.00% - 40.00%
40.00% - 60.00%
60.00% - 100.00%

Phase 2: Identify Market types

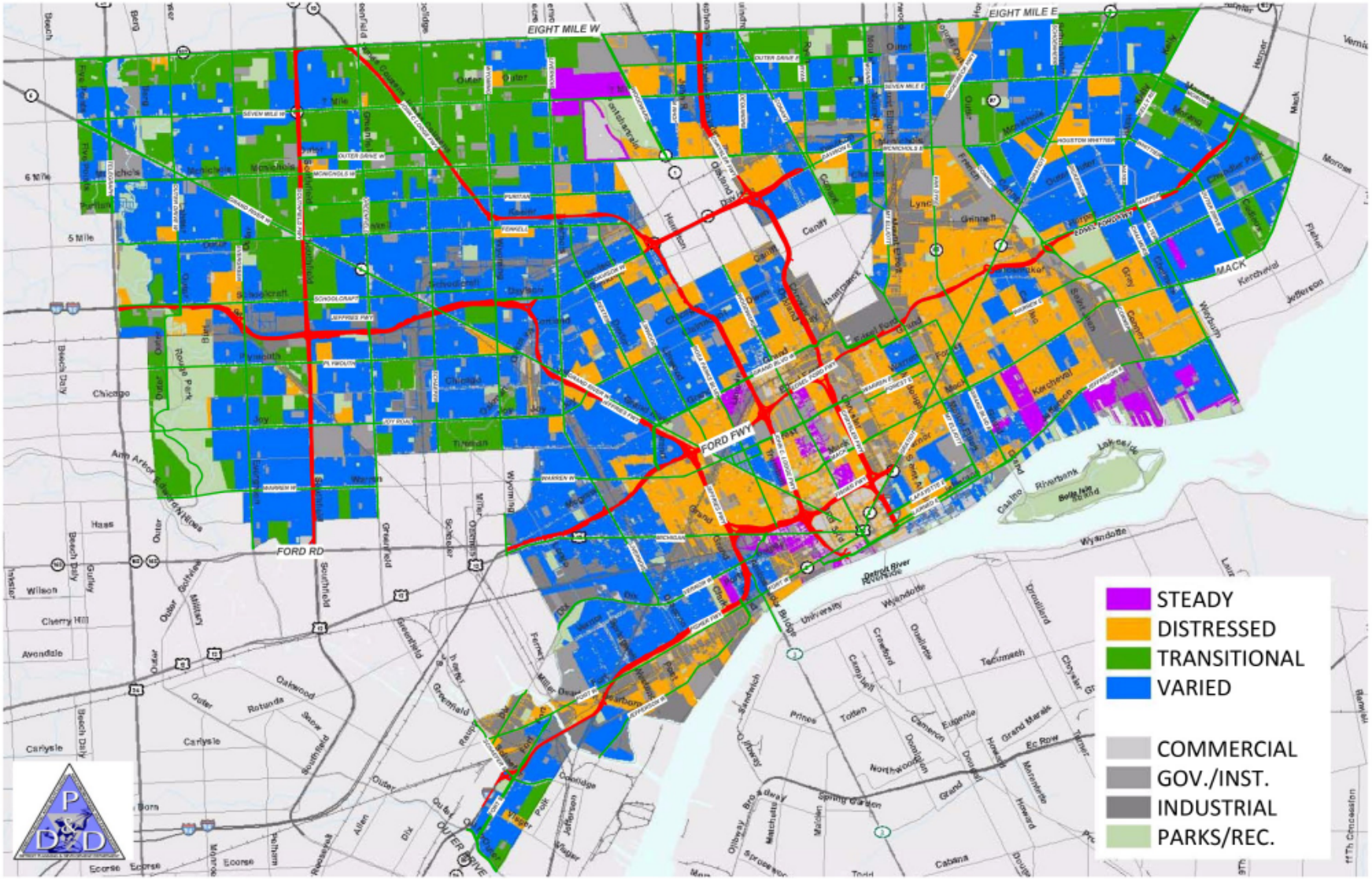
The first step in phase two of the process is to identify, through in-depth analysis, which neighbourhoods in the city have the most potential to become dense and vibrant communities as opposed to those areas where vacancy and blight are more common. Based on the information gathered in Policy Audits, the Detroit works project team will decide which neighbourhoods fall under one of three categories: steady, transitional, or distressed.

Steady markets are those neighbourhoods with low amounts of vacancy, high housing prices and an overall positive environment.[6]

Transitional markets are those with a higher amount of vacancy than steady markets, but there is a need for some work to be done in order to make these areas viable. These neighbourhoods have been identified as being high in potential for possible rehabilitation of REO(real estate owned) properties.[7]

Distressed markets have a high amount of vacancy and blight. These areas within the city have been in a steady state of decline for long periods of time. These areas are characterized by vacant homes, many empty lots, over grown vegetation and a near-complete absence of activity.[8]

Figure 2.5 *(Opposite)* Mapping market categories.


STEADY
DISTRESSED
TRANSITIONAL
VARIED
COMMERCIAL
GOV./INST.
INDUSTRIAL
PARKS/REC.
EIGHT MILE W
EIGHT MILE E
FORD RD
FORD FWY
MACK
P&D

Phase 3: Decide on service concentrations

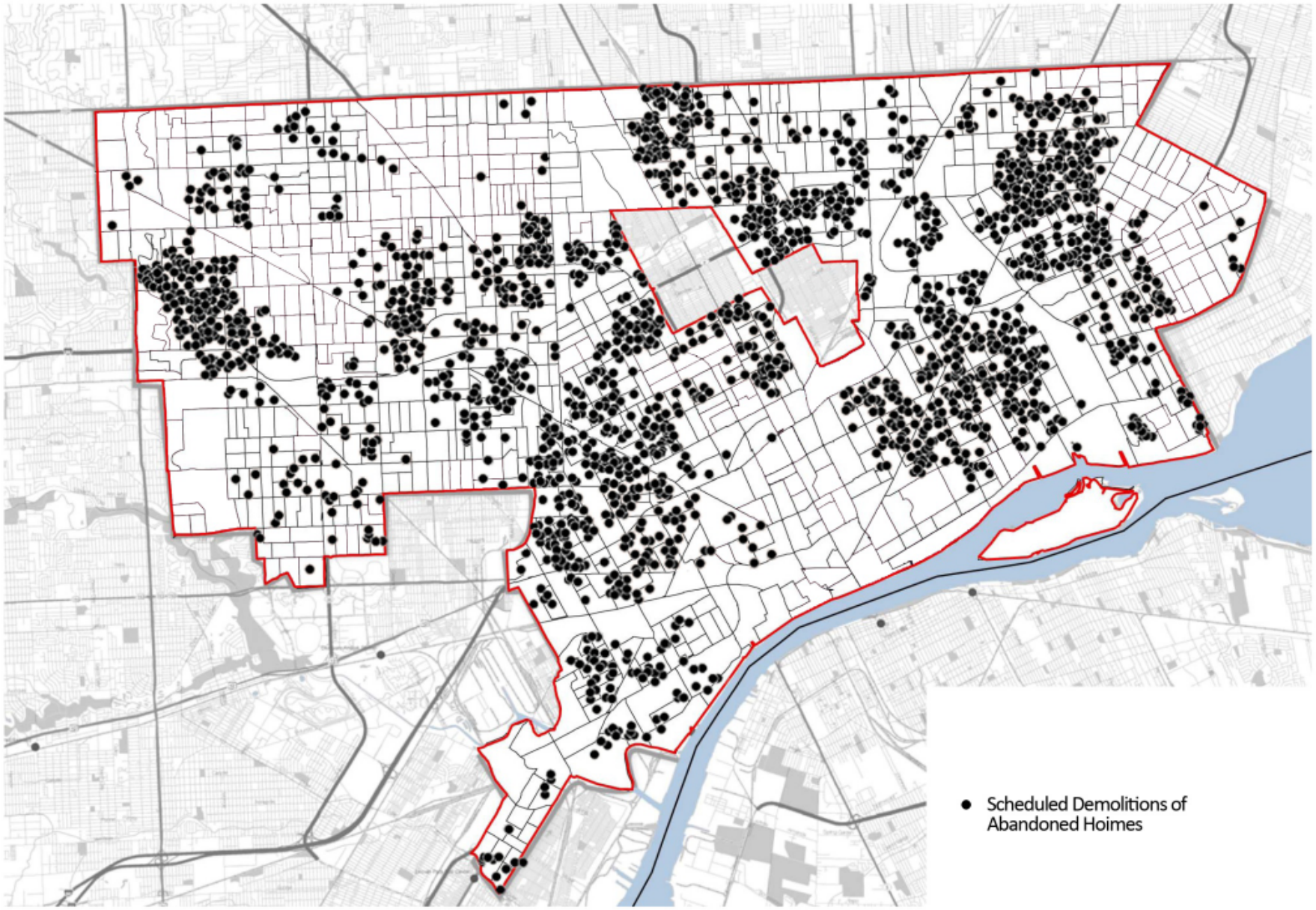
The Detroit Works Project team has identified several services that the City must provide in order to improve the quality of life for the remaining residents. These services include: blight elimination, infrastructure improvements, beautification, and land use. Each of these services will be provided to all three market types with varying emphasis based on the needs of the neighbourhood and the City as a whole. [9]

Blight Elimination

One of Mayor Bing's first steps was to approve a plan to clear out as many dangerous and unsightly abandoned structures as possible. The current plan calls for as many as 10,000 demolitions by the end of 2013.[10] There are many dangerous structures in Detroit that have remained vacant for years. Mayor Dave Bing's focus is to clear out dangerous and unproductive structures that contribute to an environment of crime, property damage and a negative perception of Detroit.[11]

A high concentration of blight elimination will take place in distressed and transitional markets as these are the areas of the city that need to make the most dramatic changes for the betterment of the city. If these markets are to become attractive living places for residents, blight elimination and improvements to infrastructure will be essential.

Figure 2.6 *(Opposite) Map* showing vacant homes planned for demolition before 2013.


Scheduled Demolitions of
Abandoned Hoimes

Infrastructure Improvements

The infrastructure of Detroit was built to support 2 million residents, many of which resided in single detached dwellings. Detroit is made up of 139 square miles of land divided into blocks by approximately 2,500 miles of roadway.[12] The cost to maintain city systems such as water and hydro distribution, garbage collection and disposal, recycling programs, public transportation road repair is a huge burden.

Due to the reduced population, utility companies are operating significantly under capacity. In order to compensate for the lost revenue, rates have increased in the city, further taxing the already poor residents of Detroit.[13] Inefficiencies such as this need to be discovered and eliminated in order to free up money for repairs and improvements.

With the budget for infrastructure stretched thin, hard decisions need to be made about which areas of the city need to be improved to serve the greater good, while many residents will see a reduction of city services. Markets classified as distressed have fewer residents and will receive a decrease in services but an increase in recreational services. Much of the work to improve roads and utilities will be done in transitional markets in order to increase the market value of land in these areas of the city.[14]

Beautification

Considering the sheer amount of vacant lots in Detroit, in the beginning it will be impossible to reuse every lot for productive activity. Most of the vacant lots in the City go unmaintained year around and during the summer months especially, look completely over grown. It is not necessary to design a beautiful landscape for every vacant lot, however, a bit of landscape maintenance and garbage clean-up would go a long way towards changing the way people look at the city.

Many neighbourhood organizations and not for profit groups have taken up this cause in the City. The Greening of Detroit is one such organization that is made up mostly of volunteers. In addition to providing support to the City's community gardeners, they organize tree and shrub plantings and provide landscape and horticulture education while working with city officials and neighbourhood organizations to improve the local ecology.[15]

Land use

With the amount of vacant land that Detroit has, the question of how best to use the available land is one that needs much consideration. A large part of the Detroit works project is for the city to acquire and assemble as much of the vacant land as possible so that they can decide how to put the land to productive use. While The City continues to work on a large-scale plan to utilize the landscape to help relieve the burden of infrastructure, ordinary citizens have been working on their own plan to heal the landscape.

Urban Agriculture Movement in Detroit

As it stands today, much of Detroit's vacant land is composed of unmaintained and over grown lots that serve no purpose other than to promote the image of a desolate city. However, this is not true for all vacant lots in the city. Detroit is home to a growing effort to heal to city through Urban Agriculture.

It is estimated that in 2009, Detroit was home to some 800 community gardens and grew approximately 330,000 pounds of food.[16] With the help of non-profit organizations such as The Detroit Agricultural Network, The Greening of Detroit and Earthworks Urban Farm, Detroiters all across the city have been given the opportunity to contribute to a grassroots effort to revitalize the city while also growing healthy vegetables to feed their families.

Growing vegetables on the City's vacant land is one way to make the land productive again. The added benefits of gardening are numerous, including intangibles such as stress relief and the feeling of accomplishment. Many community farmers see urban agriculture as a way forward.

The popularity of urban agriculture has been growing quickly in recent years, which is not surprising considering that urban/community gardening has a history of becoming popular during the toughest times. Urban farming has seen highs during World War One, The Great Depression, World War Two, the 1970s recession and now the present day.[17]

One of the earliest examples of urban agriculture was introduced in Detroit in 1893. The United States was struggling through an economic recession during 1893, and many of Detroit's manufacturing plants ad to be shut down. It is estimated that 25,000 Detroit workers were left unemployed. In the spring of 1894, the famous Detroit Mayor, Hazen Pingree, introduced his idea for community gardens in the city to help feed the poor. The initiative was so successful that many other American cities began growing as well throughout the 1890s.[18]

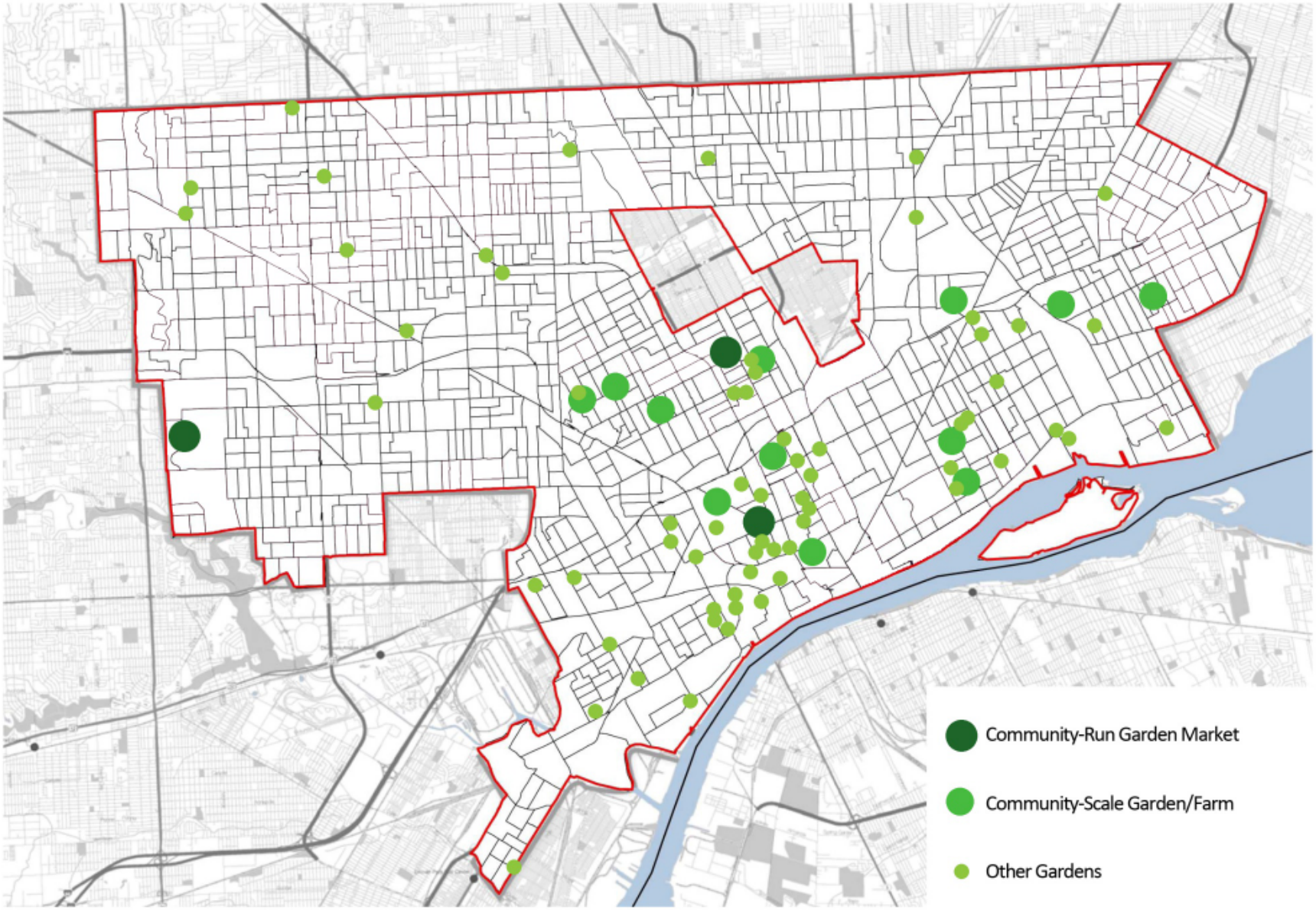
Pingree's community gardening initiative gave the poor people of Detroit the opportunity to help themselves and each other. They had healthy food to eat and something productive to do during the recession. The value of hard work is something that seems to have been lost over the last century, but Detroiters are beginning to rediscover it. Community gardening now is all about the same principles as in 1894, hard work, healthy living and community collaboration.

Figure 2.7 *(Above)* Detroit Mayor Hazen Pingree touring potato patches in 1893

While the benefits of urban agriculture are plain to see, there are multiple hurdles in the way forward. A lack of legislation in the City's by-laws makes using lots for farming, technically, illegal and subject to fines. This means that there are no rules or regulations governing or protecting the farms. Community gardens are viewed as no more than a temporary solution to vacancy, which could be forced to relocate at any time.[19] Another concern has been soil contamination. Especially In industrial zones, after decades of pollutants seeping into the ground, soil contamination is a major concern. In residential zones, the concern is not as great, most residential lots are deemed safe for growing in the ground.

The biggest challenge that urban farming needs to overcome in order grow to the next level is one that is currently being fought amongst the farmers themselves, or rather between small community farms and large-scale farms. Small scale urban farmers are resisting the idea of large scale, for-profit farms locating in the city. One such proposal is from a local business man named John Hantz. Hantz is a resident of Detroit's wealthy Indian village neighbourhood, east of downtown, and he has been trying for several years to purchase roughly 200 acres of vacant land near his home to build an urban farm. The Hantz farm would include traditional crops, apple orchards, Christmas tree farms, a petting zoo and as well as the latest in growing technology such as hydroponics and aeroponics.[20]

Figure 2.8 *(Opposite)* Map of known agriculture gardens in Detroit


Community-Run Garden Market
Community-Scale Garden/Farm
Other Gardens

Many small scale urban farmers have spoken out against Hantz's proposal, claiming that his intention is simply to purchase this valuable land at a steep discount with the intention of selling later on when Detroit's land becomes valuable again. Whether or not that is Hantz's intention or not makes little difference. The fact is that, right now, Detroit's vacant land is not valuable and desperately needs to be put to good use. Another fact is that there is ample room in the city for both large-scale and small-scale farming. In 2009, The Greening of Detroit estimated that Detroit had approximately 800 community gardens, roughly 500 acres of land (0.78 square miles). Detroit contains nearly 40 square miles of vacancy. That means roughly 1.9% of Detroit's vacant land was occupied by urban gardens in 2009.[21] There is a lot of room left to grow for this promising trend in Detroit.

Urban farming will not single handedly save the city and return Detroit to the heights of the past, but it is one way to ease the burden on Detroit's citizens by building stronger and healthier communities, beautifying the landscape, increasing property values and beginning to fill the voids.

Adaptive Reuse of Abandoned Architecture in Detroit

The issue of land-use is the focus of the Detroit Work's project and is a critical concern that needs to be addressed; however, one aspect of land-reuse strategies that has been largely overlooked is the potential to reuse existing buildings as well. Abandoned buildings are a drain on the city just as vacant land is, and with thousands of structures slated for demolition, it may be that the city sees no better option as to run them over and create more vacant land. Demolition of a building and clearing the lot is an expensive operation to undergo, and in many cases, is necessary for the health and safety of neighbourhood residents. However, the estimated cost of demolishing a small to medium-size structure in Detroit (ie: a single-family home) is approximately $8,500.[22] With a pledge to demolish 10,000 homes, the cost of such a plan becomes a burden on the city. Rather than spending so much money to essentially turn one burden into a smaller burden, opportunities can be found to reuse existing abandoned buildings for a productive purpose.

Adaptively reusing the existing building stock has many benefits that could help to revitalize the neighbourhoods of Detroit. The Benefits discussed below include reinvesting in the history of communities, cost savings in reusing structures and sustainability.

Community Impact

Although not all existing buildings are good candidates for reuse, reusing an existing building either for the purpose it was built, or for an entirely new use, has many inherent benefits that could work toward healing Detroit's blighted neighbourhoods. Introducing activity and new life in a neighbourhood creates interest and has the potential to bring neighbours together. Refurbishing an abandoned building for this purpose has the added benefit of imbuing a rising from the ashes sort of mentality that community members can rally around. By lifting the burden of an abandoned building and introducing a productive activity, creating job opportunities and meaningful interactions, the neighbourhood can begin to heal. Community investment should be a key principle of adaptive reuse. However, as previously stated, not all abandoned buildings represent a good investment in the community. In most cases, the best candidates for reuse are historic structures.

Architectural Heritage

As discussed in Chapter 1, Detroit has a rich history and was in a seeming endless state of boom during the late 1800s through to the 1920s. It was during this time that many of Detroit's historic buildings broke ground. In the decades since, while the rest of the neighbourhood has crumbled away, many of these structures have stood the test of time even if underutilized or left vacant. Historic buildings often represent a shared experience for generations of residents and possibly a source of hidden strength that can be built upon. Only by reusing existing historic structures is it possible to preserve the unique character and aesthetic quality of old Detroit.

Implementation

Most developments in Detroit in the near future will be heavily influenced by the financial feasibility of the project. The advantage of starting with a building that is already built can often result in both time and cost savings. Choosing to renovate an existing building is one way to avoid dealing with increasing cost of a new construction.[23] Most buildings constructed before 1940 are masonry bearing structures that relied on massive walls for insulation. In buildings such as this, the structure is usually in good condition and will not require much work to repair. Other building elements such as windows, doors, roofing, and mechanical systems can wear out over time and typically do not last throughout the life span of a building. In most cases these elements would need to be replaced and upgraded. Removing non-load bearing walls to customize a space does not incur much cost and can be done largely by unpaid volunteers. One advantage to reusing historic structures is that the detail and character in older buildings would be expensive to reproduce using today's labour.[24]

Well suited to Green Rehabilitation

Finally, in addition to the potential cost savings of reusing an existing building, there are many sustainable benefits that should not be overlooked. First and foremost, renovating keeps building materials out of landfills. Additionally, the compact multi storey composition of early century buildings is inherently more efficient than expansive single storey buildings. Furthermore, high ceilings allow for new mechanical systems as well as natural light to reduce overall energy consumption.

Conclusion

Since the heights of the 1950s, Detroit has fallen into a perpetual state of decline, regressing into a city overwhelmed by the burdens of population loss and poor living conditions. Failure over the decades to correct such cultural deterrents such as vacancy, high crime rates, high unemployment rates, concentrated poverty and a school system in crisis has not only kept people from relocating to Detroit but has further perpetuated the constant decline of population and urban decay. According to a recent survey by the Chicago-based Glengariff Group Inc., of the residents remaining in Detroit over 50% say they would leave the city if they could, and nearly 40% plan to leave within the next five years.[25]

In order to combat the poor living conditions in the city and try to improve the quality of life for Detroit residents, Mayor Dave Bing has come up with the planning exercise known as The Detroit Works Project. This plan outlines strategies for dealing with these cultural deterrents as well as optimizing city services and infrastructure. Adaptive reuse and urban agriculture specifically represent two opportunities to utilize the abundant amounts of vacant land and buildings for a productive purpose with many benefits for the neighbourhoods of Detroit.

From the beginning, The Detroit Works Project has encouraged the involvement of the communities of Detroit. It appears as though policy makers have recognized that with limited funding available, the success of The Detroit Works Project depends greatly on the citizens of Detroit and their resolve to help improve their own neighbourhoods through hard work and cooperation. The emergence of the urban agriculture movement in Detroit signifies that the citizens of Detroit are ready and willing to play a larger role in revitalizing the city.

End Notes

[1] "About | Detroit Works Project." Detroit Works Project. http://detroitworksproject.com/about-us-2/ (accessed November 15, 2010).
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Part 3: Case Studies

The following chapter provides five case studies for consideration – Viet Village in New Orleans, Louisiana; Greensgrow farms in Philadelphia, Pennsylvania; Lansing's high-tech schools in Lansing, Michigan; the Smiley Building in Durango, Colorado; and Badger Rock School for Urban Agriculture and Community in Madison, Wisconsin. Each of these case studies is an example of a community driven initiative undertaken in cities across the United States in response to the needs of the communities they serve.

As discussed in the previous chapter, the needs of Detroit citizens are great, and there are many burdens that plague Detroit, such as: vacant land, vacant buildings, neighbourhood blight, and unemployment. Each case study to follow addresses at least one of the major issues that can be found in post-industrial cities such as Detroit.

Viet Village – New Orleans, Louisiana

The site of this urban farm is a 20-acre plot located in East New Orleans in the Upper Ninth Ward as part of a vibrant Vietnamese community. This development incorporates commercial farming plots for entrepreneurial enterprises, community farming plots for non-profit, livestock farming, on-site farmer's markets, and also sports and recreational areas. The Viet Village hopes to become a model for low-tech sustainable site development. Natural processes such as bio-filtration of water resources and alternative energy sources such as wind, and passive and active solar power are sustainable means to operate the farm.

It is estimated, based on the history of the markets prior to Katrina that upwards of 3000 people will come to the market every Saturday to shop for fresh fruits and vegetables. Sports fields and recreation areas are also proposed as part of the overall plan to encourage community involvement.

Water management in this flood-prone area is very important. A balance must be struck between providing enough water for the crops to survive while compensating for excess water during heavy rainfall. The farm will operate around a central reservoir of rain water. Water from the reservoir will be pumped to the crops using renewable wind energy. The run-off from irrigation is then filtered through the central bio-filtration canal leading back to the central reservoir. [1]

Figure 3.1 *(Above)* Proposed Viet Village Urban Farm, New Orleans

Greensgrow Urban Farm – Philadelphia, Pennsylvania

The Greensgrow farm is in the upper east side of Philadelphia on the site of a former steel galvanizing plant. Greensgrow was founded in 1997 as an entrepreneurial experiment by Mary Seton Corboy. It now operates as a hybrid for-profit business and a non-profit organization for the community.

Operating on-site is a plant nursery, raised bed vegetable and flower gardens, bee farming, hydroponics growing, biodiesel processing, and community-supported agriculture activities. Greensgrow's goal has been to become a self-sufficient business that can meet the community's need for fresh produce and to rejuvenate a community in post industrial Philadelphia.

Greensgrow's farm serves the Kensington neighbourhood in many ways other than providing fresh vegetables to eat. Low-income families can participate in the Local Initiative for Food Education (LIFE) program that provides nutritional advice, food preparation training, and volunteering opportunities. In addition, Greensgrow offers guided tours of their operations, including lessons on composting, hydroponics, and raising bees.[2]

Figure 3.2 *(Top)* Greensgrow farms learning center
Figure 3.3 *(Bottom)* Greensgrow's on-site farmer's market

Lansing's high-tech schools – Lansing, Michigan

Similar to Detroit, the decline of the manufacturing industry in Michigan has greatly affected the city of Lansing. Although not as pronounced as Detroit, the exodus of citizens has left many fractured neighbourhoods and a large amount of vacant land and buildings. Like Detroit, Lansing has seen dozens of school closings in the past three decades due to young families leaving Michigan for better opportunities "in the 1970s, the Lansing School District comprised of 57 Schools and 33,971; today it has only 13,977 students in 31 schools."[3]

Unlike Detroit, a new high-tech industry has been taking root in Lansing. Looking for ways to save money, these young companies have been taking advantage of the City's existing building stock, namely abandoned schools. Companies like Niowave, which designs and manufactures parts for particle accelerators, have been buying closed schools for less than $20 per square foot.[4] James Herbert, founder and CEO of Neogen, another corporation housed in a formerly abandoned school, estimates that a total renovation of the existing school would cost roughly $60 per square foot.[5] With the help of Brownfield and Historic tax credits, the cost savings make adaptive reuse very attractive to young companies.

The reuse of abandoned schools is a sustainable approach to turning neighbourhood burdens into success stories. The Lansing school district has sold at least nine school buildings since 2004.[6] In this scenario, there are no losers. Money from the sale of the building goes directly to youth of Lansing's school district, while the neighbourhood has regained a symbol of hope that schools once represented.

Figure 3.4 *(Above)* Cedar Street School Redevelopment, Lansing, Mi.

The Smiley Building – Durango, Colorado

The Smiley building, a depression-era junior high school, was in operation until 1994. The school was shuttered due to declining enrolment and was put up for sale as surplus by the school district.[7]

Brothers Charlie and John Shaw and friend Lisa Bodwalk purchased the school building in 1997. The three partners had a vision for a community activity center and spent the following 10 years renovating the school while collecting tenants. The extensive renovations covered everything from reconditioning the floors to replacing the roofing, including: fixing up the classrooms, painting, all new mechanical and electrical systems, landscaping the grounds, replacing the windows and restoring the brick façade. The trio of owners were intent on maintaining the historic look of the building and restoration grants from The Colorado Historical Society helped to cover the costs of renovating.[8]

When the building was purchased in 1997, the partners began receiving utility bills upwards of $5000.00 per month. By 2007, the Shaws and Bodwalk were able to get those bills down to less than $400.00 per month.[9] By focusing on energy conservation measures as well as energy production, the Smiley building became the only building of its size and type in America that creates all of its own energy.[10] Among the systems in place and conservation measures taken at Smiley is the replacement of all the old windows, added insulation, occupancy sensors for lighting ventilation, high-efficiency heating and cooling systems as well as an array of solar panels on the roof.[11]

Today the Smiley building is a vibrant community arts center housing up to 30 tenants and a successful example adaptive reuse for an abandoned school.

Figure 3.5 *(Top left)* weekend famer's market held on site
Figure 3.6 *(Top right)* community gardens growing on the school grounds
Figure 3.7 *(Bottom)* Bird's eye view of Smiley showing solar panels on the roof

Badger Rock School for Urban Agriculture and Community – Madison, Wisconsin

The Center for Resilient Cities in partnership with Growing Power is working on a plan for a school for urban agriculture and community gardening. The Center for Resilient Cities is a Milwaukie based non-profit research and design firm that specializes in urban planning. In 2010, Resilient Cities purchased an old elementary school building in Madison, Wisconsin with plans to reuse the building. Badger Rock Elementary School was built in 1957 and closed in the 1980s. The school served as a storage facility until the Center for Resilient cities purchased the building in 2010.[12]

Resilient Cities envisions a community center where food is grown, harvested, marketed, sold and consumed all in one place.[13]

The site is a 4-acre lot which will be utilized entirely for urban agriculture and community gardens. The plan is for year-round fruit and vegetable production using greenhouses and a water reservoir. [14] In addition to an extensive urban agriculture program, the building will incorporate roughly 5000 square feet for small shops and neighbourhood scale businesses as well as a community center with a program of workshops focusing on nutrition, cooking, creative writing and arts. Furthermore a project based charter middle school with hands-on experience with agriculture will operate during the school year. The building will also serve as a sustainable energy services center, demonstrating strategies for the creation and efficient use of sustainable energy.[15] The original plan was to reuse the old school building, but the ambitious program outgrew the building. The plan evolved into deconstructing the school and salvaging as much material as possible for the new construction.[16]

Case Study Analysis

Each case study in this section is an example of a project that addresses at least one issue in their respective neighbourhoods that is also prevalent in Detroit neighbourhoods.

The first case study, Viet Village, takes an underutilized tract of land in a neighbourhood devastated by the hurricane Katrina in 2005, and turns it into a place for the community to share in something special. The idea for an urban farm both builds on the Vietnamese community's heritage of vegetable growing and tackles the burden of flooding in the area. Viet Village is also an example of a large scale urban farming venture similar to the Hantz Farms proposal in Detroit. If implemented in Detroit, a farm such as this has the potential to positively influence an entire neighbourhood simply by utilizing the currently vacant land. In Detroit, the catastrophe was not a natural disaster and was considerably more stretched out over time, but the result was much the same. The fractured neighbourhoods of Detroit and the citizens who live in them would benefit from a common cause, one that brings people together and improves the quality of life in their neighbourhood.

The second case study, Greensgrow Urban Farms, is an example of a different kind of application for urban farms. Like Detroit, Philadelphia is a post-industrial town that has suffered the loss of population and jobs since the 1950s and also like Detroit has an abundance of abandoned industrial parks. One of the major concerns with urban farming is the contamination of the soil. On industrial sites, contaminates in the ground are too high to grow plants for consumption. Greensgrow gets around this by not planting in the ground and instead using alternative growing techniques, such as hydroponics. This also allows for the growing of vegetables in a controlled climate year round, something that will be necessary in Detroit during the winter. The study of Greensgrow is also significant because this urban farm is a for-profit business. The urban farms found in Detroit are mostly operated by non-profit organizations. The model for Greensgrow farms represents an opportunity to create blue-collar jobs in employment starved neighbourhoods.

While urban farms such as Viet Village and Greensgrow farms could help utilize vacant land in Detroit, the third case study, Lansing's High Tech Schools, is an example of ways to reuse the existing building stock in Detroit. Many neighbourhoods in Detroit are burdened with an abandoned school building with no future but possible demolition in sight. In Lansing, these neighbourhood eyesores are being restored, by budding technology companies, into places of activity. When the building is so cheap, these companies are more than willing to utilize and maintain the historic structures, creating activity and jobs at the center of neighbourhoods. As the new industry in Lansing proves, school buildings are incredibly adaptable and the cost of renovating is often less than building new. While the hope of industry revival may not be realistic in Detroit, buildings such as these schools need not remain empty.

The fourth case study, The Smiley Building, builds upon the idea of reusing schools. However, in this case the building is a community center that emphasizes sustainability. The Smiley building has become a model for efficiency in the United States. Smiley is a depression-era building that is nearly completely self-sustaining as well as an example of successful adaptive reuse that serves the community. A commitment, such as this, to sustainable energy in Detroit could go a long way in relieving the over burdened infrastructure of the City.

The last case study, Badger Rock School for urban agriculture and community, combines many of the elements discussed here into one facility. The project occupies an underutilized building and site, creates jobs in the neighbourhood, provides practical learning for the youth and volunteers of the neighbourhood and provides fresh vegetables for the community. In Detroit, urban agriculture is a popular trend but the farmers of Detroit rely heavily on the expertise of non-profit organizations such as the Greening of Detroit. The labour force in Detroit is available, but if urban agriculture is to continue to grow, they will require training. In an application similar to Badger Rock, hands-on training programs could be tailored to provide the unemployed labour force with the knowledge necessary to operate an urban farm in the neighbourhood with local support right around the corner. The grounds associated with schools are perfect places to plant community gardens where prospective farmers can get hands-on learning experience, while the classrooms inside can be used to teach the theory behind new techniques such as hydroponics.

Each of these projects could conceivably be adapted to Detroit. Detroit has the assets needed for these projects to work; the City also has the need for projects such as these. In each case study, the project has at least one element that addresses a need that is prevalent in Detroit. In each case, the reuse of vacant or underutilized land and buildings would be a boon for the city of Detroit. The reuse of existing historic structures maintains the history and character of the neighbourhoods. Each project creates jobs for the neighbourhood in some capacity. Finally, the community benefits from meaningful social interactions and collaboration as well as benefiting from the production of healthy food locally. There is an opportunity to learn from these case studies to craft a proposal in Detroit that addresses all the most important needs of the neighbourhoods in the City.

End Notes

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Part 4: Design Intervention Proposal

Introduction

The following design intervention proposal aims to provide a strategy for the stabilization of Detroit neighbourhoods through the reuse of existing, under-utilized assets found within. After decades of steady population loss, many neighbourhoods of Detroit have been left in a perpetual state of decline while the number of vacant lots and buildings across the city continue to grow every day. The lively and populated streets of the 1950s are a distant memory, giving way to unprecedented urban decay. The residents of Detroit neighbourhoods continue to pack-up their belongings and move on, seeking higher quality of life somewhere in the suburbs. Stabilization is needed at the neighbourhood scale to sustain the life remaining within the city. While the municipal government attempts to implement sweeping change across the city, the neighbourhoods of Detroit need only look within their own borders to find the tools necessary to become self-sustaining.

Simply, by redefining burdens such as vacant land, abandoned buildings and unemployment as assets, it is possible to reshape a bereft neighbourhood. Vacant land can become productive land by eliminating blight and putting the citizens of Detroit back to work. The specific task of urban agriculture has already provided for many communities the means to work together and help define a new legacy for Detroit. The following design intervention is about organizing this movement by providing the tools and training needed to launch this grassroots initiative to new heights.

For this proposal, this thesis will present a series of stages that outline the steps necessary to establish an institution for a neighbourhood association that would act as a community agricultural learning center. Led by a team of both volunteers and paid staff, this learning center would be a place for the community to gather and share in the restorative activity of urban agriculture. Capitalizing on the growing popularity of urban agriculture in Detroit, this thesis proposes a learning center where community members would take part in a series of workshops to learn and gain experience in vegetable crop farming. The goal of such an institution would be to teach potential farmers how to operate and maintain an urban garden, thereby helping the urban farming movement to spread across the city and affect real change in the neighbourhoods of Detroit.

Stage 1: **Identify Area of Intervention, borders and boundaries**

The study area used as a prototype here is the combination of two existing neighbourhoods, Indian Village and East English Village. These two neighbourhoods are bounded by main streets; Jefferson on the south, Mack Avenue on the north, Van Dyke on the west and Cadillac Blvd. on the east side. This area exemplifies both the disparity of Detroit as well as the pockets of hidden strength that can be found in the city.

The study area is also of interest because it is the proposed neighbourhood for the Hantz Farms proposal. John Hantz has proposed his idea for a large-scale for-profit farm to the city of Detroit and a decision regarding zoning for this application is forthcoming. With Hantz Farms close by this neighbourhood has the potential to become the center of the urban agriculture movement in Detroit, attracting much attention and tourism to the area. With Hantz Farms laying the ground work for legislation, this design proposal could have more success in this neighbourhood as a jumping-off point for other neighbourhoods in the city.

The site identified in this study area is the currently vacant John Montieth School building, which has been vacant since the spring of 2010. John Montieth is one of many school buildings all across Detroit that sits empty and can be purchased from the Detroit Public School Board for far less than the cost of building a new facility.

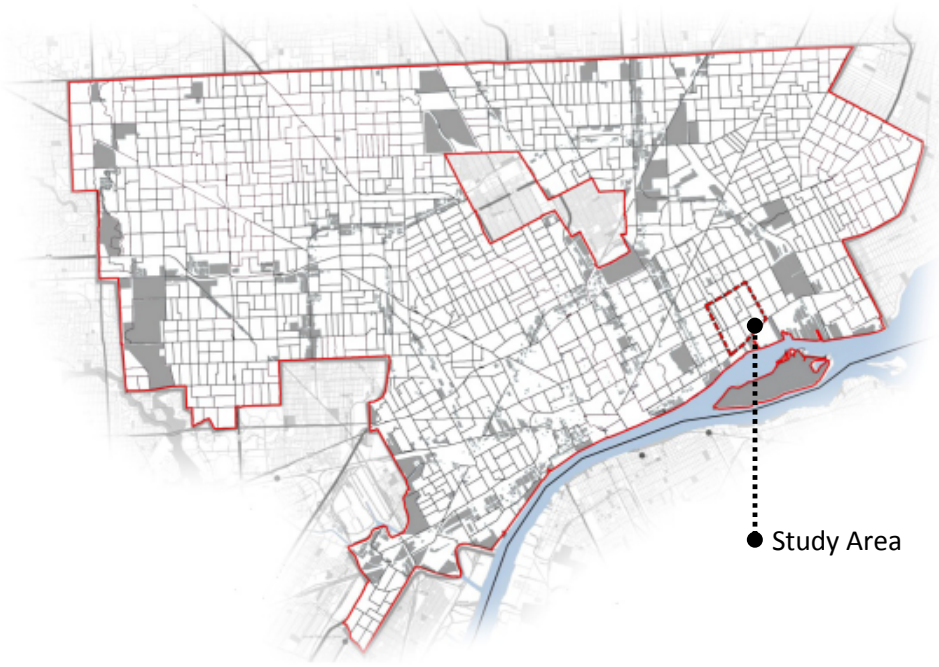


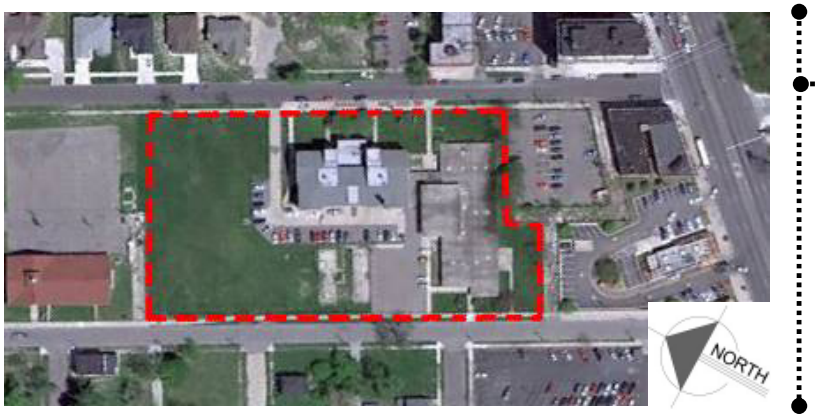
Figure 4.1 *(Top)* Key map of Detroit showing study area.
Figure 4.2 *(Bottom)* John Montieth school building.

Indian Village

Indian Village as a historic neighbourhood dates back to 1893 when the land was developed by Cook Farm Company, Ltd. to be a "first class residential district on a generous scale." The prices were set very high so only very wealthy people could build there. Many of the homes in this area were designed by Detroit's premier architects, including Albert Kahn, and the neighbourhood was home to the likes of Edsel Ford, son of Henry Ford, and Henry Leland, founder of Lincoln and Cadillac automobiles. Today, Indian Village remains one of the wealthiest neighbourhoods in Detroit and has weathered the economic disaster that has befallen the rest of the city.[1]

East English Village

East English Village does not have the rich history enjoyed by Indian Village and has not fared nearly as well in the last 50 years. The line that separates the two neighbourhoods is as clear on the street as it is on a map. The streets are in disrepair, and in many cases what homes are left between the vacant lots are lucky to be standing.



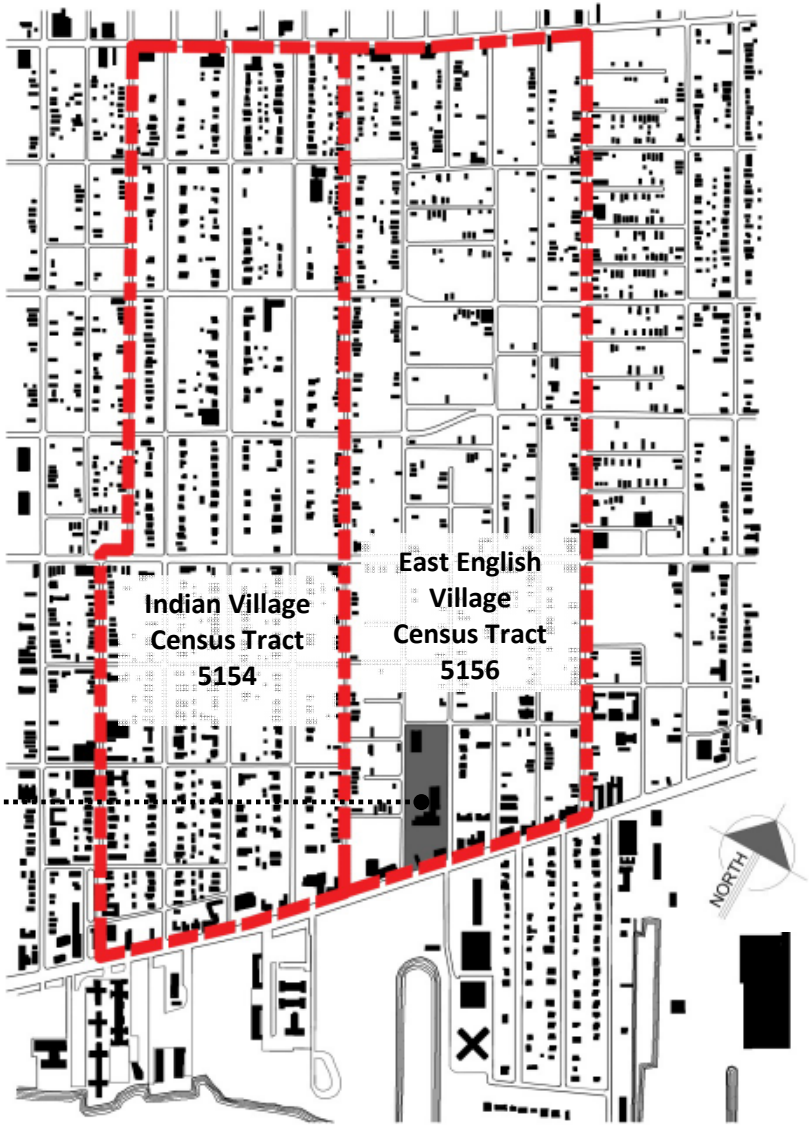


Figure 4.3 *(Above)* Map of study area showing 2010 Census Tracts.
Figure 4.4 *(left)* Arial image of the proposed site

Stage 2: **Identify Abandoned Structures**

A single, small, pillaged and burned-out house does little good for the neighbourhood by standing alone and empty for years. These homes have become the focal point for visitors and the media as a means to express the dire situation the city faces. They serve as a reminder of the failures of the past and present that only serve to dampen spirits. This is a weight on the citizen's shoulders that must be lifted if renewal is to take place.

In order to get a real picture of how much vacancy there is in these neighbourhoods, it is necessary to look at each structure individually to determine if the building is a home to someone, or if it has been abandoned. This is far from the worst area of the city, yet there are approximately 180 vacant structures within the borders of this study area.

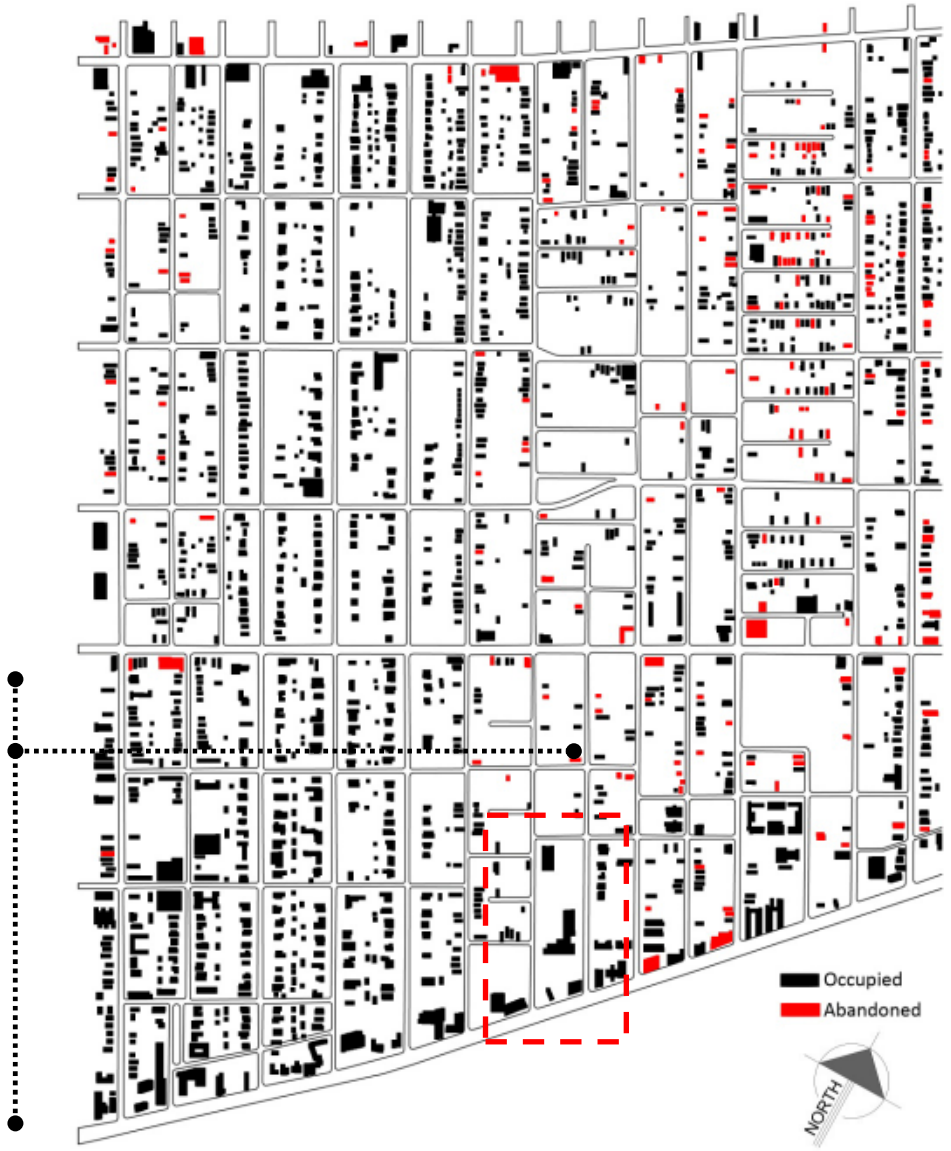


Figure 4.5 *(Left)* Abandoned home in East English Village
Figure 4.6 *(Above)* Abandoned buildings in neighbourhood

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Figure 4.7 *(Left)* Neighbourhood figure ground
Figure 4.8 *(Top)* Indian Village bird's eye view, 2010
Figure 4.9 *(Middle)* East English Village bird's eye view, 2010
Figure 4.10 *(Bottom)* East English Village bird's eye view, 2010

Stage 3: **Assess the needs of the neighbourhood**

With much of the city in such a state of distress for so long, as we contemplate a strategy for revitalization, this begs the questions of what do Detroit neighbourhoods need to improve the quality of life in the city.

Jobs
Having plenty of career opportunities nearby is essential to maintain the stability of a neighbourhood. The slow but steady decline of the auto industry, culminating in the collapse of 2008, left many people in Detroit without income to support their households and thus the neighbourhood has suffered. The creation of jobs nearby should be paramount in any effort to stabilize a distressed neighbourhood.

In order to help create jobs, increased support to locally owned businesses can give a lift to the neighbourhoods of Detroit. Nearby grocery stores and fresh food outlets are scarce in Detroit and are one example of an opportunity for local entrepreneurs to fill a void in the neighbourhood.

Social hubs/Social relationships
Strengthening the collective morale of Detroiters should be a top priority in the revitalization of city neighbourhoods. Having more locally owned and operated businesses not only creates work for residents but in many cases provide unexpected social interaction between neighbours, helping to strengthen neighbourhood ties. Meaningful social interactions can be had anywhere from after-school sports to continuing education courses. The City's vacant land provides plenty of space and opportunities for out-door activities that can bring the resident of a neighbourhood together.

Physical beauty/ Aesthetic Character
According to Richard Florida, an urban theorist and author of *The Rise of the Creative Class,* physical beauty is the number-one factor when measuring one's emotional attachment to their neighbourhood.[2] While it is true that crumbling homes, over grown landscaping, vandalism and garbage, litter many streets in Detroit, there is also much beauty to be found. Detroit has a rich history, and many historic buildings can be found all across the city. Indian Village is home to many large beautiful homes as well as several historic schools and churches that can also be found in East English Village.

Cleaning up the streets and eliminating the blight in distressed markets such as East English Village will yield open landscapes that reveal the underlying beauty in the neighbourhood.

Emotional attachment/Long-term residents
The ultimate goal of this thesis and any neighbourhood stabilization proposal is the creation of neighbourhoods in which people are happy to live in. All of the aforementioned elements are necessary in order for new residents of the neighbourhood to feel an emotional attachment to where they live. Long-time residents who have a sentimental attachment to the neighbourhood, simply because they have lived there for so long, have a profound and deep understanding of the neighbourhood that may not be readily apparent to a newcomer. Long-time residents anchor the neighbourhood and are the people most invested in a recovery.

Neighbourhood Representation

Many neighbourhoods in Detroit do not have organized neighbourhood associations to represent the citizens living in certain areas of the city. The benefits of an organized neighbourhood association are apparent when on the streets in Indian Village. For example, those living in East English Village do not have the benefit of a neighbourhood watch patrol to keep the streets safe. The role of the neighbourhood association is typically for a small committee of people living in the neighbourhood to discuss ways to improve the neighbourhood, seek funding from the city, and organize and carry out community initiatives. A dedicated and organized neighbourhood association gives a voice to citizens who would otherwise go unheard.

Intermediary Institutions

As previously discussed, there are numerous grassroots operations within the city that seek to make a difference. What they have accomplished in the city is amazing; however, they have not been able to inspire citywide change. Not-for-profit institutions owned and operated by neighbourhood associations are the key to organizing these movements.

Urban Farming is poised to take Detroit by storm, both as community driven initiatives, and as a for-profit business. Detroit has the assets necessary to support this industry with plenty of vacant land to grow the crops, the need for fresh food in the city, and a work force badly in need of jobs.

Urban Farming on a large scale, however, is not as easy to start up as backyard gardens. It will be necessary for potential farmers to be trained in the cultivation and preservation of crops. There will be demand for machine operators, mechanics and horticulturists as well. Intermediary institutions are needed to provide the training necessary to launch urban farming as a new industry. There is a workforce ready and willing to get involved and with the right training, urban farming will grow into a competitive business that will benefit the neighbourhood and the city at large.

Stage 4: **Identify Existing Community Buildings**

This intervention focuses heavily on bringing the community closer through community driven interventions. Therefore, it is important to identify existing buildings and gathering places that serve this purpose. The two big categories of public spaces are schools and religious buildings. This neighbourhood has thirty different religious structures of varying denominations of Christianity. As far as schools are concerned, there is an elementary school, a middle school and a high school that are public schools. There are also two private schools with paid admissions. All but one of these schools is still in operation. John Montieth (pictured above) was closed in July of 2010 due to deteriorating building condition and the need for the board of education to consolidate building operations.[3]

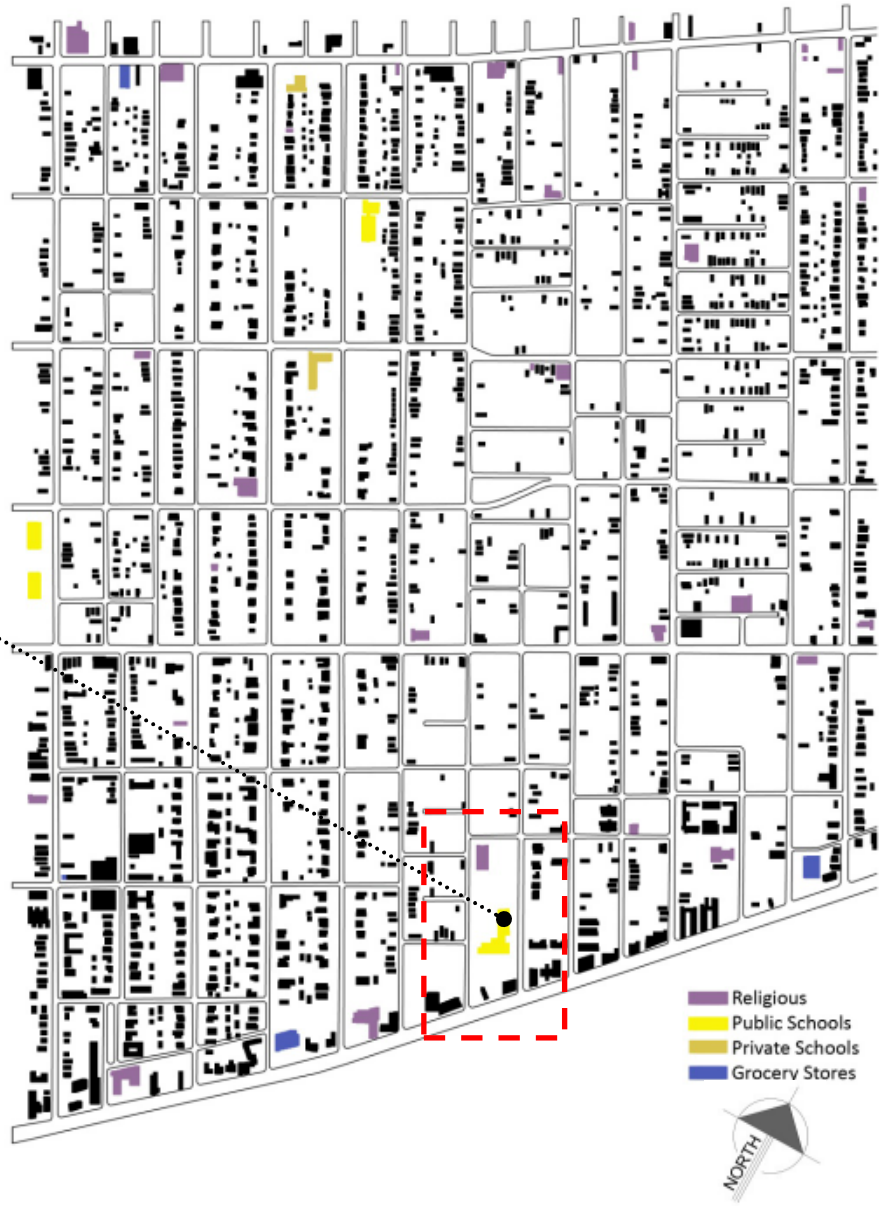


Figure 4.11 *(Left Bottom)* John Montieth (Trombly) Alternative High School, closed in 2010
Figure 4.12 *(Above)* Neighbourhood community buildings

Stage 5: **Analyzing the Site for Rehabilitation**

The Site

Having argued that the existing building stock is a valuable asset in Detroit, for this design proposal, John Montieth Alternative High School has been chosen as the site for rehabilitation. This site has been identified as one having the potential to accommodate a new intermediary institution for the teaching of urban agriculture.

John Montieth is located just off of Jefferson Ave on the East side of the city in East English Village. Jefferson is a main artery of the city that runs along the Detroit River and is a commercial corridor that leads directly to the heart of Downtown. The proximity to Jefferson provides easy access to the city and a certain amount of security for the premise, while there is still enough separation to buffer the noise of the 8 lane thoroughfare.

The site is approximately three acres with on-site parking and an open field once used for sports. The size of the lot and the large open field would be ideal for the size of the program from the outset. The building itself is set back from the street with large landscape buffers, and a few medium-size trees are located on site as well. To the south of the site is a three storey mixed-use residential building and a McDonald's Restaurant. To the north of the site is a religious assembly building that draws crowds for service on the weekends. On either side opposite the site, there are a few occupied single-family homes amongst a landscape of mostly vacant lots. As the program grows over time, the adjacent vacant lots could provide the opportunity for some spill-over of the program into the neighbourhood.

Figure 4.13 *(Top)* John Montieth Alternative High School, closed in 2010
Figure 4.14 *(Middle)* John Montieth's Outdoor Yard
Figure 4.15 *(Bottom)* Looking towards Jefferson Avenue from John Montieth

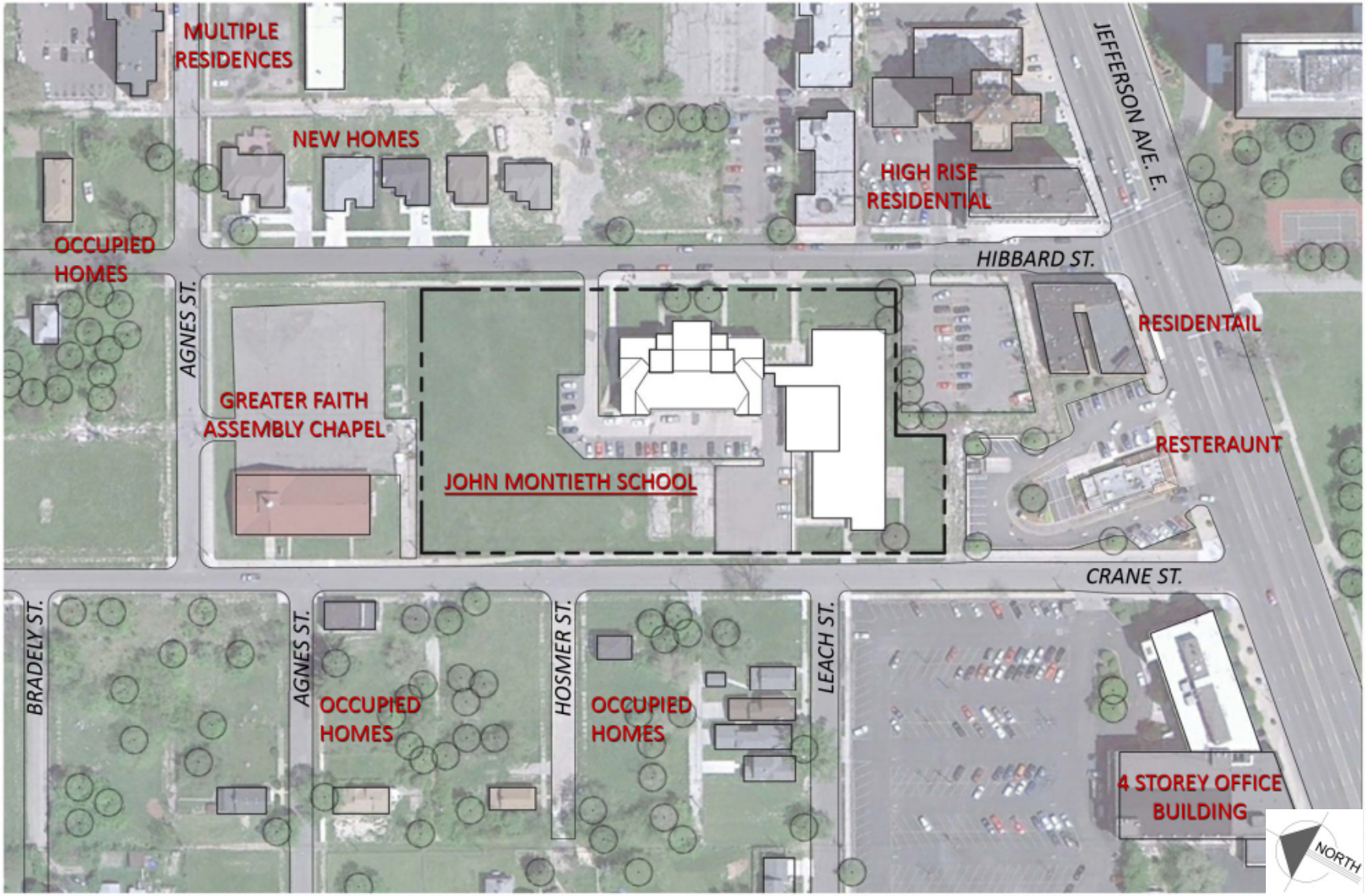


Figure 4.16 *(Above)* Arial Existing Site Plan of John Montieth (Trombly) Alternative High School

The Existing Building

The original John Montieth was constructed in 1905 from load bearing masonry with wood floors and a wood roof construction. The 3 storey school was added on to with a single storey mid-century addition. The addition saw the inclusion of eight new classrooms and a gymnasium. Before closing in 2010, John Montieth, now known as Trombly, served as an alternative high school for troubled youth. The Detroit public school board elected to close the school in 2010, citing the deteriorating building condition and the need to consolidate building operations as reasons for the closure.[4]

For the purpose of this theoretical proposal, it will be assumed that structure of the building is not in need of major repairs. However the mechanical and electrical systems would need to be replaced. In addition to new high efficiency mechanical equipment, insulation should be added to the exterior walls to ensure maximum comfort. Windows and doors as well as the roofing should be replaced, and repairs should be made to the brick facade, otherwise much of the work would be cosmetic in nature. Consideration could also be given to the demolition of a portion of the school. The number of classrooms in the mid-century addition may not be needed for the program. However, the gymnasium provides a large gathering area that could be valuable.

Following the example set by the adaptive reuse of schools in Lansing; this historic building could be updated, refinished, and re-purposed as a community focal point. Utilizing local volunteers to rehabilitate this school also creates a labour of love and symbol of unity for the neighbourhood.

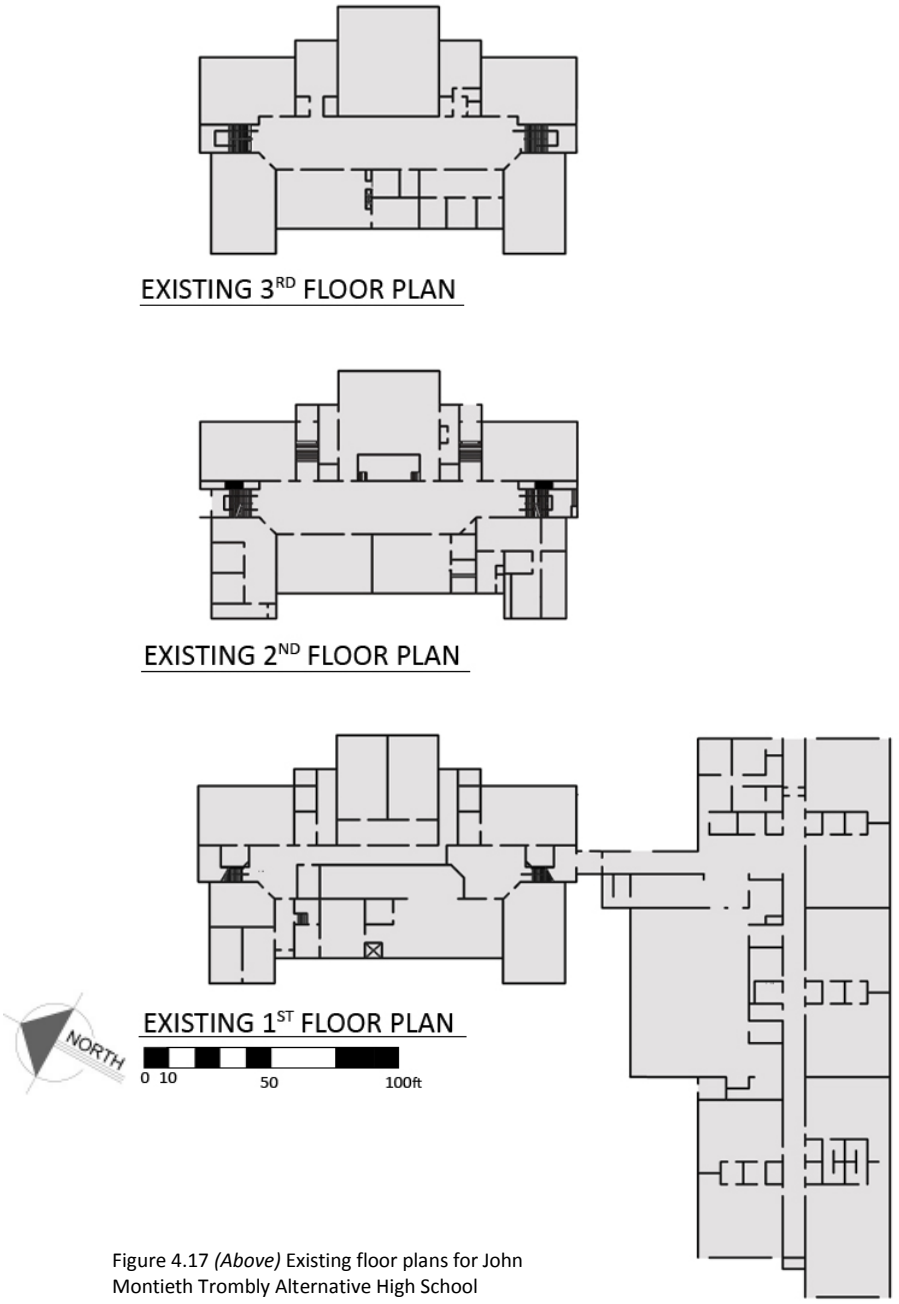


Figure 4.17 *(Above)* Existing floor plans for John Montieth Trombly Alternative High School

Stage 6: **Develop the Program**

The idea for a community farming educational center has been established and having analyzed the site, it is now possible to begin considering what type of programs can best serve the neighbourhood from this location. The following is a list of potential activities that could take place at this intermediary institution in order to train local citizens in operating and maintaining an urban garden in the city.

In-class workshops
Workshops, housed in the existing building, could be held for teaching traditional and new farming techniques, including: growing cycles, compost and fertilization, irrigation, harvesting, crop tendencies, building raised beds, hydroponics and aeroponics. There is plenty of curriculum to cover for those that are serious about growing.

Hands-on workshops
In-class workshops would provide a solid base for the potential farmers; however, the real learning would take place outside where hands-on workshops could turn citizens of Detroit into urban farmers. Experienced urban farmers would use the grounds available on-site to demonstrate farming techniques to the potential farmers. The grounds would be kept, and the gardens tended as part of these hands-on workshops.

Food prep and cooking classes
The kitchens in the buildings could be utilizing for cooking classes that teach participants to prepare the crops and use them to make healthy meals for their families. In addition to class sessions, the kitchens could be opened to the public for use as community kitchens where community members could get together to prepare and share a meal.

After-school programs/ youth involvement
Farming is, by nature, a culmination of hard work, teamwork, and science. Here in 2012, it is difficult to teach the value of hard work to inner-city youth. Through after-school programs or direct integration with the school system, the youth of Detroit can learn about farming and horticulture, giving them positive and skill-building activities in which they can partake.

Tool sharing
Many citizens of Detroit likely do not possess the right tools for gardening. A tool sharing program for use in the gardens on site is a good way to get more people involved. With the expansion of urban farming in the neighbourhood, tool rentals and the possibility of a future retail store should be considered during the design.

Flower Nursery
Vegetables need not be the only thing growing at the site. A flower nursery could be established on the site as part of the program. Offering a program like this widens the potential consumer base for weekend markets. There is also the potential that a nursery could attract more visitors to the site on a daily basis, heightening awareness.

Farmer's Market
The on- site parking area could be used on the weekends for a small neighbourhood farmer's market. This gives the farmers an opportunity to reap the benefits of their hard work and provide a venue for meaningful interactions between farmers and the community. Farmer's markets are popular weekend destinations for people in the country side, and there is no reason a public space could not be filled with people shopping for food and flowers, direct from the farm, in Detroit.

Stage 7: **Overall Site Plan**

One of the greatest benefits of reusing school buildings is that schools are one of the few existing conditions in the city that comes with large lots formerly used for outdoor activities. John Montieth sits on a lot of roughly 3 acres, leaving lots of currently unused land that can be utilized in the program.

Planting Beds
The empty field in **Figure 4.14** would be utilized in this proposal for the main gardening area of the site. The vegetable gardens would serve as training ground for the farming education program where Detroiters would learn the basics of vegetable gardening. In this proposal, community farming has an important role to play and these gardens would also be open to the public for anyone interested in planting their own food. These small plots would allow neighbourhood citizens to take control of their own well being, giving them purpose and a role in shaping the overall landscape of Detroit.

Greenhouse Buildings
Greenhouses are very important as they would allow growing food during the cold winter months. Using alternative growing techniques such as hydroponics and aquaculture, farmers can produce high yields even during these months. This would allow the farming to go on year round and also expand the boundaries of the education program to include these more advanced growing techniques.

Market Square
For the weekend farmer's market, the existing parking lot could be utilized. Since sustainability of the site is a priority, the existing pavement, which is in poor condition, should be replaced with a porous solution to help with storm water management.

Children's Play Area
A children's play area would be another great addition to the site for the younger children. Parents who volunteer or take part in the education program may be grateful for a place on-site for their kids to play while they work in the gardens.

The Tool Storage
Tool storage should have good access to all areas of the site and be designed large enough to accommodate sufficient tools for future expansion of the site.

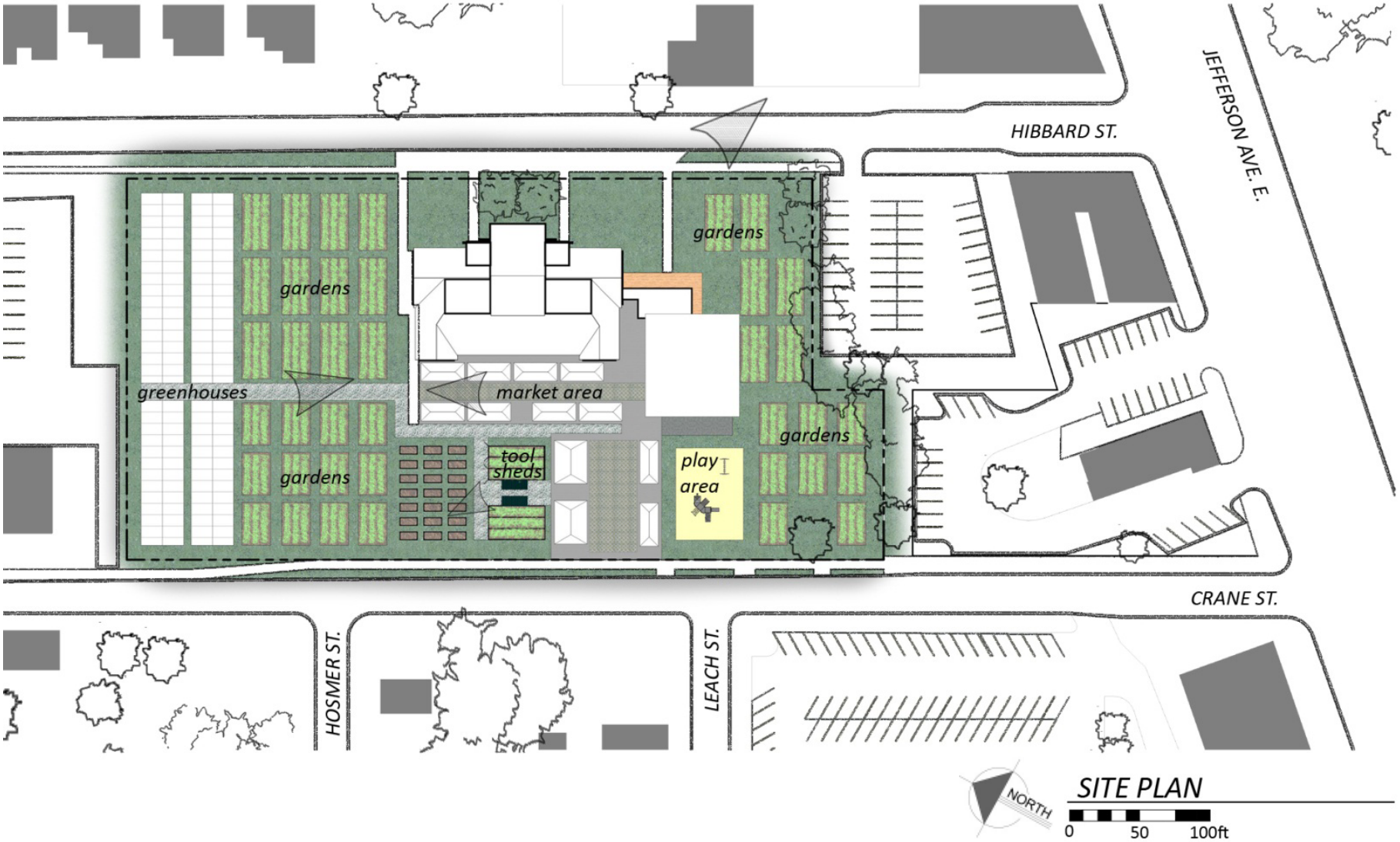


Figure 4.18 *(Above)* Proposed Site Plan

Stage 8: **Repurposing the Building**

The reuse of school buildings is made easier by the incredibly versatile nature of their design. In this case, conversion of this old school into a community agriculture educational center is a natural fit. In order to reduce costs of the development, reuse of the space “as is” would be ideal for a non-profit organization. Much of the program can be accommodated in the existing classrooms and offices with minimal work.

Stage 8 of the design process begins with establishing an understanding of what types or spaces exist within the school and how can these spaces be most efficiently converted for the new use:

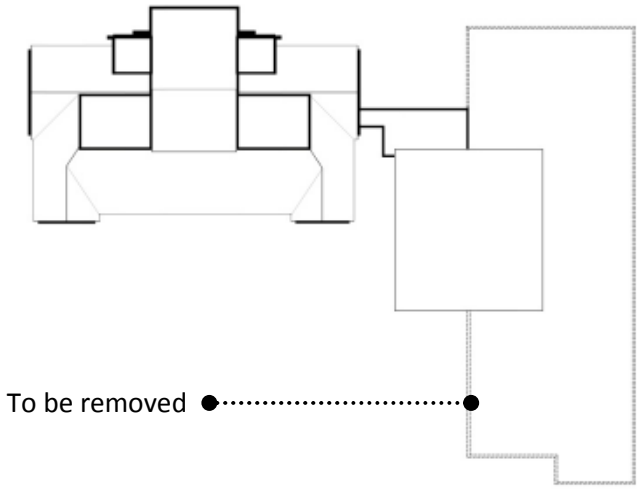
- Classrooms could be reused as is, for in-class learning and workshops.
- The Gymnasium is well suited for recreational uses, indoor market stalls, large presentations, and other community gatherings.
- Former administration office should be reused as is for day to day administration duties of the institution.
- On the 1st floor classrooms and storage rooms could be converted to the kitchen space for cooking classes and community use.
- Other classrooms on the 1st floor level can be utilized for dinning and other recreational uses.

- Classrooms
- Office/Administration
- Recreation
- Kitchen/Food Storage
- Washrooms
- Circulation

PROPOSED FLOOR PLANS
N.T.S.

Figure 4.19 *(Above)* Proposed Floor Plans for existing building
Figure 4.20 *(Opposite Top)* Portion of existing building to be removed
Figure 4.21 *(Opposite Bottom)* Rendering of John Montieth Urban Agriculture School

While the original John Montieth School fits the program well, an addition was added to the original building sometime in the mid-20th century. This portion of the existing building was designed and built during a time when school buildings were being built at an incredible rate with cheapest possible construction methods and materials. This addition included eight new classrooms and a gymnasium. The classroom spaces in this portion of the building will not be needed for the program and in fact, the land that the building occupies could be put to better uses as outdoor gardens. For this reason, in this proposal, this portion of the building would be dismantled and demolished, reclaiming as many materials as possible, with the exception of the gymnasium. The gymnasium would be saved and reused as a space for large gatherings and recreational uses for the community.



This is a rendering of the new John Montieth Urban Agriculture School as seen from Hibbard St. The refinished Gymnasium and Lounge areas can be seen with garden plots at the front of the site. Proposed greenhouses can be seen in the distance

Figure 4.22 *(Above)* Building Elevations
Figure 4.23 *(Opposite)* Rendering of the proposed greenhouses

The proposed garden plots and greenhouses can be seen in this rendering. These gardens will serve as training grounds for workshop participants.

A weekend farmer's market depicted here, would take place Saturday and Sunday mornings. This would be an opportunity for program participants to sell the food or plants they have grown either on-site or at their home garden to fellow community members.

Figure 4.24 *(Opposite)* Rendering of proposed market area.

This rendering is of the proposed reuse of shipping storage containers as the tool sheds. Containers such as these are fully customizable and available in Detroit. These containers would provide a secure place to store gardening tools for the community.

Figure 4.25 *(Opposite)* Rendering of the proposed storage containers reused for tool sheds

Stage 9: Construction of the Site & Sustainable Practices

In order for a development such as this to operate in Detroit and become successful, development and operation costs must be kept to a minimum as much as possible. This development should strive to follow the example set by the Smiley building by utilizing energy-saving techniques and technology to reduce energy costs.

Similar to the Smiley building case study, a focus on sustainability measures would help in reducing energy costs for the operation of the facility. By investing some funds up front into things like new high-efficiency mechanical systems, new windows, insulation, water storage and even small items like occupancy sensors, the cost savings in energy would be immense.

By choosing to house the program in an existing building as opposed to building a new facility, reduces development costs greatly, however, the use of reclaimed materials does not have to end there. Much of the site, including the tool shed, market stalls, plant shelving, storage or any raised planting beds, can be built using reclaimed materials. As discussed in **stage 2** of the proposal, there are still many abandoned homes left standing in the neighbourhood. It is possible to dismantle the empty homes and salvage materials that can be used for the construction of this site. Removing blighted structures from the neighbourhood and reusing the materials would strengthen the neighbourhood on two fronts and decreases the need for newly fabricated materials, saving energy and pollution.

Labour Resources

Minimizing the need for professional contracting to rehabilitate the building and site would also decrease costs for the development. Much of the work in this proposal can also be done by a mix of skilled and unskilled volunteers. Utilizing a volunteer workforce is possible for work such as the interior finishes, building planting beds, planting crops and the market pavilions.

Figure 4.26 *(Above)* Site Plan showing labour resources

Unskilled Volunteers

- Finish work inside the building
- Building the raised planter boxes
- Preparing topsoil for planting
- Planting crops
- Setting up market stalls
- Organizing the tool shed

Skilled Volunteers

- Demolition of interior non-load bearing Walls
- Construction of interior partitions
- Clearing the site
- Setting up playground equipment
- Tool shed green roof

Professional Contracting

- removal of hazardous materials
- Deconstruction of existing building
- Existing roof and façade repairs
- Locating the shipping containers on site
- Constructing the greenhouses
- Removal of existing asphalt
- New mechanical and electrical systems

Stage 10: **Get the Community Involved**

In stage 4, 30 different religious buildings were identified within the study area. Many Detroiters are dedicated church goers, and Sunday mornings are likely the best time to witness the community members coming together to celebrate their faith. In order to gain traction within the community it would be beneficial to engage the church-going population during the planning stages. Volunteers would be needed in all stages of the planning and construction as well as operation of the proposed facility. Once the urban gardens begin to produce crops, a percentage of the yields could be donated to the church for a “meals on wheels” type initiative or other church gatherings. An informal partnership of this nature would be mutually beneficial both to the church and the farm.

Engaging the community and gaining their trust and investment would be important to the success of this proposal. There are many community organizations existing within The City that are actively working towards the same goal of attaining self-sufficiency in Detroit neighbourhoods. Organizations such as The Greening of Detroit and earthworks urban farms would be a source of valuable resources for the operations of this urban agriculture learning center. By providing a training facility to nurture these grassroots initiatives, it is possible to create a network of intermediary institutions to help grow urban agriculture in Detroit.

Stage 11: **Expand the Movement Outward into the Community**

As the program grows and gains traction within the community, the hope would be that members of the neighbourhood who participate would utilize the skills they learned at the school and work together on expanding urban agriculture within the neighbourhood. In neighbourhoods with a high amount of vacancy, there is the opportunity for the citizens to utilize the available landscape to produce fresh food and work towards becoming self-sustaining.

According to the United States 2010 Census, the total combined population for the census tracts shown in Fig 4.3 is 2,729 people.[5] Michigan State University Professor Michael Hamm has estimated that the average American needs to consume approximately 1200lbs of fresh food annually, not including beverages.[6] Using these figures, it can be estimated that this neighbourhood needs 3,274,800 lbs. of fresh food to feed the population annually.

With the goal of increasing the self-sufficiency of Detroit neighbourhoods in mind, the question of how much of the 3.3 million pounds of food that is needed can be grown within the neighbourhood itself arises. Shown in **Figure 4.27**, there is the potential for 360,993.4 square meters of urban gardens in this neighbourhood. A University of Waterloo graduate student has estimated that approximately 25.82 lbs. (11.7 kg) of fresh food per square meter could conceivably be cultivated in an urban neighbourhood of New York.[7] When this number is applied to the area of available vacant lots in this study area, the amount of fresh food that could conceivably be grown is 9,320,849.59 lbs. annually, almost triple what would be needed according to Hamm's estimate.

Figure 4.27 *(Above)* Map of neighbourhood showing opportunities for future urban farms

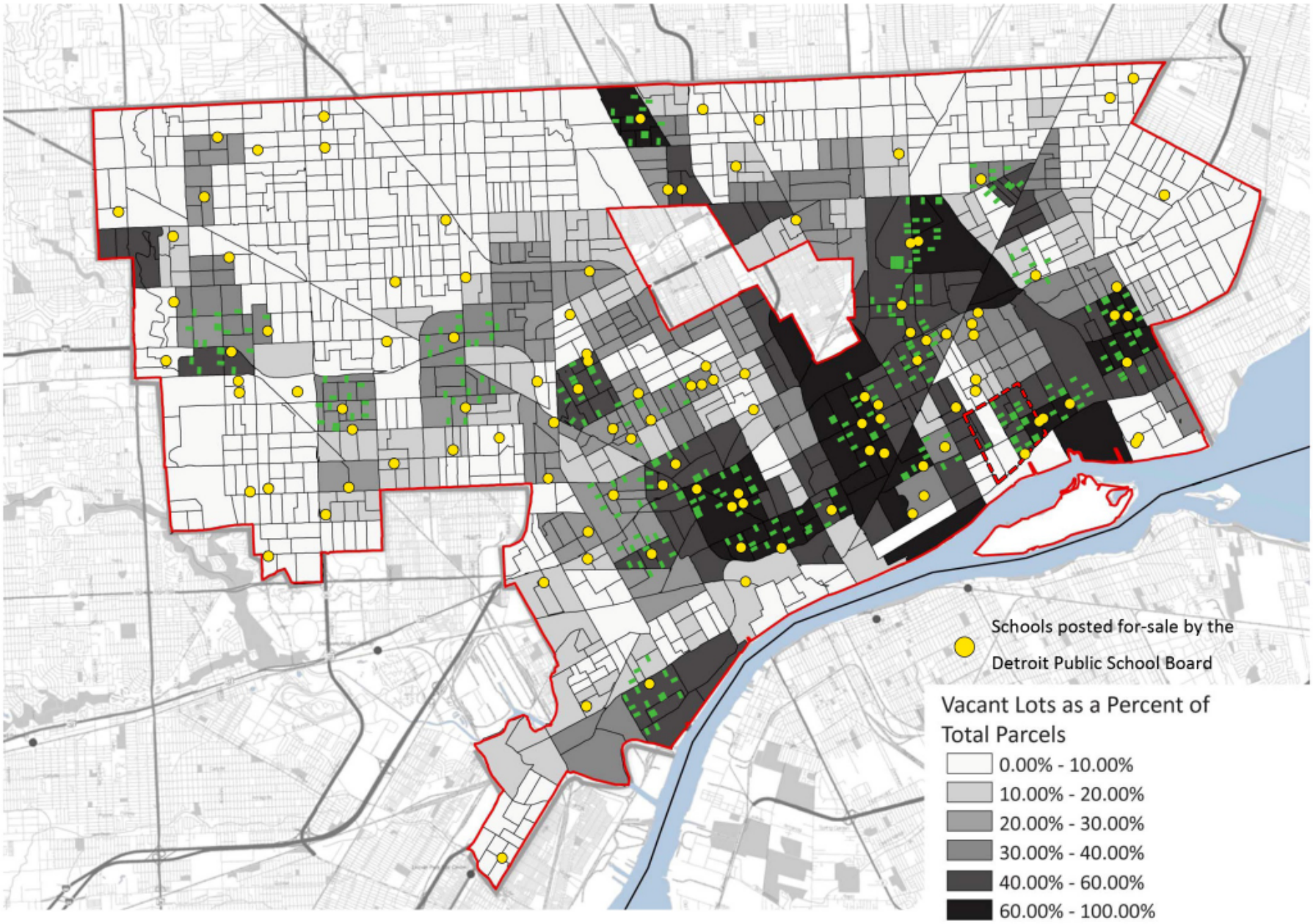
Stage 12: **Replicate the Model**

In a study published in 2010, Hamm and Colasanti argued that if all the publicly owned vacant parcels in Detroit were combined and utilized as urban farms, Detroiters could grow 76% of their vegetables and 42% of their fruits within the city.[8] Since that study was conducted the population has only decreased, and the amount of vacancy has grown. At the time of this writing, in Detroit, there are 82 neighbourhood schools sitting vacant, contributing to the blight found in every Detroit neighbourhood. This thesis has presented a proposal for one of these schools to transform the building from a burden on the neighbourhood to an asset working for the neighbourhood. By reusing John Montieth, Trombly Alternative High School as a training facility owned and operated by a community neighbourhood association, the residents of this Detroit neighbourhood would be given the tools necessary to work together and reshape their surroundings. One goal of this thesis was to provide a proposal that would show Detroiters one way to improve their own lives through hard work, establishing meaningful relationships and giving back to the community.

Urban agriculture has been growing movement in Detroit and other cities across America and the world with hopes of providing a healthy habit and food to those who need it. In Detroit, the need is great and facilities such as the proposed would help grow urban agriculture to the next level where it can begin to reshape a devastated city and change the lives of thousands. This proposal is for one school on the lower east side of Detroit in a neighbourhood where there is plenty of vacant land to reshape, however, this is not the most vacant of Detroit's neighbourhoods. Many of these neighbourhoods are home to one or more of the abandoned schools mentioned above. The intention of this thesis has not only been to provide one neighbourhood with a possible solution, but to build a model for a new type of infrastructure that would support and encourage city-wide redevelopment.

Figure 4.28 shows a map of the vacant schools overlaid on a map showing the amount of vacancy in Detroit neighbourhoods. This simple analysis shows not only how big of a burden the citizens of Detroit are under but also how many possible assets and opportunities exist within the city and are waiting to be put to good use.

Figure 4.28 *(Opposite)* Map of Detroit showing vacant schools and possible urban agriculture expansion in the most vacant areas of the city


Schools posted for-sale by the
Detroit Public School Board
Vacant Lots as a Percent of
Total Parcels
0.00% - 10.00%
10.00% - 20.00%
20.00% - 30.00%
30.00% - 40.00%
40.00% - 60.00%
60.00% - 100.00%

End Notes

[1] "Home | Historic Indian Village Association." Historic Indian Village Association. http://indianvillagedetroit.org/ (accessed October 20, 2010).

[2] Andrew Price, "You Are Where You Live: What Makes a Perfect Neighbourhood", *Good,* http://www.good.is/post/you-are-where-you-live-what-makes-a-perfect-neighbourhood/ (accessed February 26th, 2012)

[3] "Detroit Public Schools, Final Decision Regarding Building Closures, Repurposing of Buildings and Program Changes 2010 Through 2012" *Detroit Public Schools Office of Real Estate.* http://detroitk12.org/admin/ppo/plant/real_estate/ (accessed May 29th, 2011)

[4] Ibid

[5] "2010 Census Interactive Population Map" *2010 Census,* http://2010.census.gov/2010census/popmap/ (accessed July 10th 2012)

[6] John Gallagher, *Reimagining Detroit: Opportunities for Defining an American City.* (Detroit, Mi.: Wayne State University Press, 2010), pg 64

[7] Michael Ramsay, *Urban agriculture – redefining urban communities through local growing,* (Waterloo, On.: University of Waterloo, 2007)

[8] Kathryn J.A. Colasanti and Michael W. Hamm, "Assessing the Local Food Supply Capacity of Detroit, Michigan," *Journal of Agriculture, Food Systems, and Community Development* 1, no. 2(2010) pg. 41-58 http://www.agdevjournal.com/volume-1-issue-2.html (accessed November 14, 2012)

Conclusion

Throughout the thesis, the subject of stabilizing the neighbourhoods of Detroit has led to several conclusions regarding improving day to day living conditions as well as, over time, redefining the local identity of distressed neighbourhoods. To deal with these issues the thesis specifically identifies the strategy of reusing existing infrastructure and transforming it from a burden on the City into a valuable asset that works for the citizens of Detroit.

Distressed neighbourhoods have been identified in the thesis as areas of Detroit that have seen the steepest decline in population over the years and as a result the highest amounts of vacancy. It is important to note that this thesis does not suggest that a low population density is inherently linked to vacancy. As discussed in chapter 4, some areas of the city, like Indian Village, have a low population density, but the land is owned and maintained, and the city receives property taxes from the owners, therefore, the land can be considered productive. Unfortunately, this important distinction does not apply to nearly 30% of Detroit's land mass. The term distressed neighbourhoods refers to places like East English Village, where the burden of unproductive vacant land is much heavier.

The decade's long decline of these once strong neighbourhoods in Detroit has made way for an intense feeling of emptiness and abandonment that now characterizes the living conditions of Detroit's remaining 700,000 residents. The core issue that Detroit now faces lies in the sheer amount of vacancy in the city that contributes to a sense of danger and uneasiness in the open spaces. With huge vacant lots separated by burnt-out homes and the roads in utter disrepair, there is little reason for anyone to relocate to the city and as such, the neighbourhoods of Detroit have been in a perpetual state of decline. The over-arching goal of this thesis has been to propose a project that would help to redefine the local identity of distressed neighbourhoods and replace that feeling of uneasiness with one of hope for a brighter future. To this end, this thesis proposes taking a transformative approach that reuses existing burdens, such as vacant land, as assets to stabilize the decline of urban neighbourhoods.

Detroit as a leader

Detroit is not the only city in America that is dealing with a depleted population. Many other cities across the United States that followed Detroit in creating a manufacturing base during the industrial revolution have seen comparable circumstances in the decline of industry.

During the industrial revolution of the early 1900s, Detroit was a pioneer in developing the means to transport goods and people, a major innovation that changed the way humans lived in this world. The rapid development of this new way of life transformed the United States and led to an explosive period of population growth in American *rust belt* cities led by Detroit. Unfortunately, the ensuing scramble to accommodate millions of people led to a litany of bad decision making that has pushed Detroit down a long path towards devastation, losing 60% of the population in the process. Detroit's infrastructure was designed and built for over 2 million people; however, the allure of the suburban American dream perpetuated by bad decision making, worked towards the decentralization of both industry and the population, leaving the city bankrupt and largely vacant.

Of all the *rust belt* cities that have been and continue to be affected by the transition away from an industrial economy, Detroit has seen both the most success and the most devastation. Once a city of nearly two million people, today, Detroit represents the worst-case scenario and is therefore, the city that others will look to for precedence. It is important to note that the strategy for intervention presented in chapter 4 is specific to a single

neighbourhood in Detroit and is in response to the existing conditions at street level in this area. This thesis does not address the specific physical, economical, or social conditions of any city or neighbourhood outside of Detroit. However, through deliberation, customization and application, this strategy is intended to serve as a model for neighbourhood stabilization both in Detroit and in other *rust belt* cities.

Just as Detroit was a leader in revolutionizing American culture during the early 1900s, there is an opportunity in Detroit now to initiate a cultural revolution that could help to solve the problem of vacancy found in American *Rust Belt* Cities.

Neighbourhood Stabilization

In order to begin to reshape the culture and identity of Detroit at large, it is necessary to initiate change at the neighbourhood scale. Throughout the thesis the term neighbourhood stabilization speaks to the need to provide an incentive for residents to remain in the neighbourhood and slow the exodus of people from the city. The intention of the thesis proposal is to give residents a reason to reinvest in their own neighbourhood. In chapter 4, the thesis explores what is needed to improve the living condition of Detroit neighbourhoods, namely: jobs, social hubs, aesthetic character, emotional attachment, neighbourhood representation and an intermediary institution. Taking a critical look at the conditions of the study area, the obvious conclusions were that East English Village contained almost none of the attributes described above but has plenty of vacant land and abandoned architecture to re-purpose. By reusing an existing historic school building as a community driven school for urban agriculture, the design proposal presented immediately addresses all of the needs described.

An institution such as the proposed, owned and operated by a neighbourhood association, creates job opportunities for a blue-collar work force immediately at the institution and cultivates new opportunities in the future by the nurturing of Urban Agriculture as a business. Fixing up an existing historic school building provides aesthetic character and evokes renewed emotional attachment to a community building and historical social hub.

By providing for these needs it is possible to begin working towards redefining the local identity of the neighbourhood and giving the people a reason to remain. Furthermore, with the passage of time and hard work from community members, the burden of vacancy in the neighbourhood could begin to be lifted. As people pass through the school and take part in the program, urban agriculture would continue to grow and heal the landscape, beautifying the once empty lots and returning the land to productivity.

Urban Agriculture and Adaptive reuse

The topic of transforming the burden of vacant land and abandoned architecture into assets that work for the city has been addressed throughout the thesis. The question of how best to reuse vacant land when there is no hope of development from an outside source is one that some Detroiters have taken upon themselves to answer. Signs of the Urban Agriculture movement can be found in many Detroit neighbourhoods where residents have begun to utilize vacant lots near their homes to grow vegetables to feed their families. In many cases, multiple neighbours contribute to a community garden that benefits the entire neighbourhood. The intention of the design proposal in this thesis is to nurture and help to expand this existing movement as a means to quickly and easily return the vacant lots of Detroit to productivity.

While Urban Agriculture is a means of transforming a vacant lot, there are also many lots in the city with abandoned buildings looming over the neighbourhoods of Detroit. This thesis has

identified 82 abandoned schools from the Detroit Public School Board, each of which a burden on the neighbourhood in which it is located. The decision to propose the adaptive reuse an abandoned school is an important aspect of the design intervention. The symbolism associated with reusing a structure that once anchored the neighbourhood and provided a communal place for youth in the area is significant and the practicality of reusing a school as a learning center and saving the costs of a new building helps to make the project feasible for a city in financial crisis.

This thesis suggests that urban agriculture and adaptive reuse should play an integral role in the reimagining of neighbourhoods in Detroit based on the benefits outlined in chapter two, the context study, and chapter three, the case studies. Although many benefits and some shortcomings have been identified in the text, it is beyond the scope of this thesis to provide a full outline for the design and implementation of a working urban farm, or the rehabilitation of a historic structure.

These two options for turning burdens into assets have formed the basis for the design proposal. Urban Agriculture and adaptive reuse are inherently restorative activities with many benefits that address the need for an intervention strategy that not only provides immediate change, but is appropriate for the City of Detroit.

Community – Grassroots movements

Partly as a result of the massive reduction in population, and the increasing cost to serve neighbourhoods that are mostly vacant without the benefit of property taxes, Detroit has been in a state of financial crisis for many years. A proposal, such as the one presented in this thesis, needs to be developed with this in mind. New developments in Detroit are few and far between and are usually confined to the downtown core. In the neighbourhoods of Detroit where there is much less activity, and the density drops significantly, the scale of the project must be appropriate. The city of Detroit would not likely be able to provide much support to a development such as the proposed. Therefore, there would be a need for the community itself to be the driving force behind the program. As discussed in chapter 4, there are existing organizations such as local parishes, and the Greening of Detroit, who could provide support and benefit from a mutual relationship. However, the scale of the project and the design changes proposed to the site were intentionally kept to a minimum in order to allow for some cost savings and to keep the size of the project appropriately manageable as a community driven initiative.

To this end, the program presented in chapter 4 is designed to encourage community involvement by incorporating community driven activities that would allow the residents to take ownership of the transformation in their own neighbourhood. The educational programs would help Detroiters see the benefits of urban agriculture as well as teach them how to have an impact. Through building relationships and bringing people together for meaningful interactions, the hope is that the intangible bonds that tie a neighbourhood together could begin to be healed.

The Future of Detroit's Middle Ring and a Local Farm Economy

As outlined in chapter 4, with so much open space available in this neighbourhood as well as many other neighbourhoods surrounding downtown, the opportunity for growth is ample. As urban farming takes root in the neighbourhood and people begin to produce large quantities of food, the idea of a self sufficient food economy within each neighbourhood in Detroit can begin to take shape. This evolution will be an important step forward for the neighbourhoods considering that, counting three major grocery store chains in the United States, Kroger, Meijer, and Farmer Jack, only a single grocery store is located within city limits. Moving ahead, family owned grocery stores will play an important role in

reshaping these neighbourhoods by providing locally grown fruits and vegetables to everyone in the neighbourhood. Maintaining healthy business relationships with local grocery stores would in turn help the local farm economy to grow to the next level.

Although this thesis does not cover in detail, the workings of a farm economy, it is important to understand that what is speculated here would not compete directly with large scale commercial farming and would in turn rely on a different set of principles. It is safe to assume that the growth of a local farm economy would be reliant on government subsidies, foundation grants, fundraising initiatives and also local partnerships with operations such as lunch cafeterias and local eateries. Although the hope would be that the local farm economy would exist separately from commercial farming, the need for experimentation in competitive practises could eventually lead to expansion of the urban agriculture model to include such things as livestock farming, organically grown crops and perhaps an emphasis on horticulture science. As it pertains to the intervention strategy presented here, practices such as these, and topics such as financial management could be covered during in-class workshops as part of the program.

As each of Detroit neighbourhoods work towards the goal of self-sufficiency and experiment with different practises, a diverse yet focused farm based economy could begin to take shape in Detroit's once desolate, middle-ring, neighbourhoods.

To Reiterate

The overall focus of this thesis has been to redefine the local identify and improve the living conditions of distressed neighbourhoods. The design intervention strategy enclosed herein, argues that it is possible to reshape the landscape of a post-industrial city that has been ravaged by decades of decline. Simply by redefining the burdens of vacant land and abandoned buildings as productive assets it is possible to stabilize distressed neighbourhoods and replace the intense feeling of abandonment that characterizes Detroit with one of hope for a brighter future.

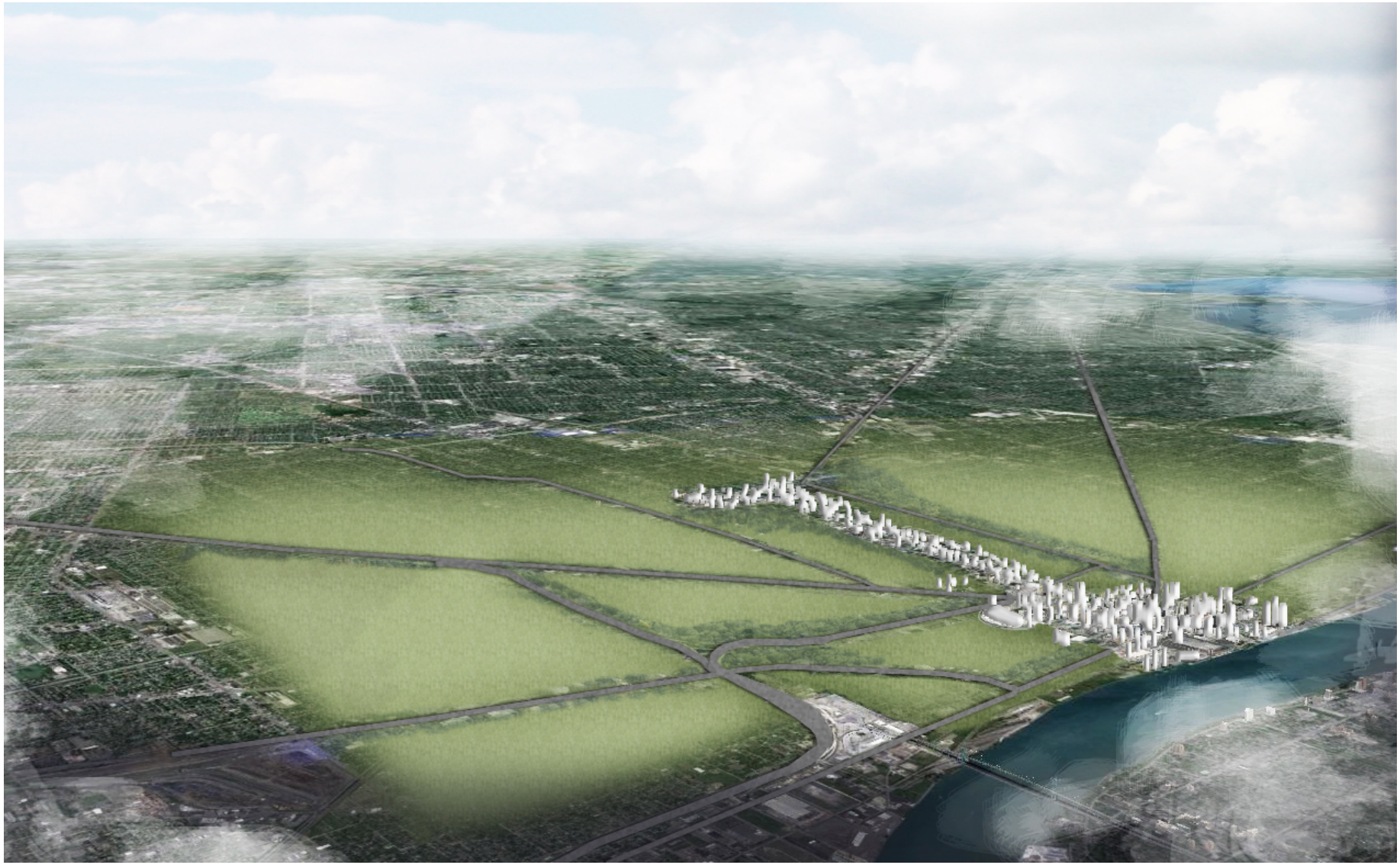


Figure 5.1 Bird's eye view rendering of a future Detroit, *The Garden City*.

Epilogue

This thesis has provided a look at the history of Detroit as an innovator and leader during the industrial revolution, as a city that has suffered immensely from an unprecedented loss of population and as a continuously blighted city. However, there is an opportunity for Detroit to once again become a leader in North American culture by moving away from manufacturing as a base and embracing the idea of becoming *The Garden City.* I imagine a Detroit where the once vacant land surrounding the city core becomes a ring of rural greenscapes where the air is clean and land is productive. This thesis has presented a proposal that addresses the early planning stages that can begin to move the city in that direction.

The intention from the beginning has always been to take a close look at the conditions in which Detroiters spend their days, and to design an intervention strategy to improve those conditions. The resulting series of stages outlined in chapter four are intended to act as a resource and inspiration for driven community members and/or urban planning officials who feel there needs to be a change.

Looking ahead, it is my sincere hope that the work I have completed here will inspire the residents of East English Village, or another of Detroit's neighbourhoods, to work towards the goal of reimagining the burden of vacancy as an asset for the long-term health and stability of the community and Detroit as a whole.

Appendix

Property Sites	Address	Zip Code	Location East or West	Site Acres	Main Cross Streets	Status	Price	Bldg (GSF)	Year Built	Year Closed	Zoning
Southwestern High School	6921 W. Fort St.	48209	W	4.6	Waterman/Post	Available 8/2012	Negotiable	198,050	1915	2012	
Finney High	4180 Marlborough	48215	E	3.1	Mack/Alter Rd	Available 8/2012	Negotiable	133,603	1927	2012	
Crockett High School	8950 Saint Cyril	48201	E	2.2	Harper/Van Dyke	Available 8/2012	Negotiable	129,592	1924	2012	
Jemison	16400 Tireman	48228	W	1.8	Tireman/E. of Southfield	Available 8/2012	Negotiable	77,384	1942	2012	
Kettering High and West Wind	6101 Van Dyke	48213	E	5.7	Van Dyke/ I-94	Available 1/2012	Negotiable	249,863	1965	2012	
Ludington	19355 Edinborough	48219	W	1.2	7 Mile / Evergreen	Available 8/2012	Negotiable	53,632	1925	2012	
Mason Elementary	19635 Mitchell	48234	E	1.1	E. Outer Drive/Conant	Available 8/2012	Negotiable	46,870	1930	2012	
O.W. Holmes Elementary	4833 Ogden Street	48210	W	3.89	Michigan/Lonyo	Pending	Negotiable	45,646	1917	2012	R2
Parker Elementary	12744 Elmira Street	48227	W	1.6	Plymouth/Meyers	Available 8/2012	Negotiable	70,528	1926	2012	R1
Carstens Elementary	2592 Coplin	48207	E	2.1	Dickerson/Kercheval	Available	Negotiable	91,277	1915	2011	R2
Detroit Transition West	4800 Collingwood Street	48204	W	1.34	Broadstreet/Elmhurst	Available	Negotiable	58,223	1926	2011	R2
Gompers Elementary	20601 W. Davison	48223	W	0.67	W. Davison/ I-96	Available	Negotiable	29,519	1954	2011	R1
Robeson Academy	2701 Fenkell	48238	W	13.2	Fenkell/Linwood	Available	Negotiable	201,389	1917	2011	M4
Sherrill Elementary	7300 Garden Street	48204	W	8.3	Tireman/Livernois	Available	Negotiable	73,000	1923	2011	R2
Vetal Elementary	14200 Westwood Street	48223	W	1.4	Schoolcraft/Evergreen	Available	Negotiable	62,253	1925	2011	R1
Arthur Middle	10125 King Richard Street	48224	E	3.8	Cadiuex/ I-94	Available	Negotiable	37,472	1930	2005	R1
Barbour Middle	4209 Seneca	48214	E	4.8	E. Forest/ Van Dyke	Available	Negotiable	156,000	1920	2009	R5
Berry Elementary	6600 Benson Street	48207	E	3.7	Mt. Elliott/Mack	Available	Negotiable	31,600	1961	2007	M3
Bethune K-8	10825 Fenkell	48227	W	3.8	Fenkell/Meyer	Available	Negotiable	82,149	1922	2010	B2 R1 R2
Birney Elementary	4055 Richton	48204	W	5.6	Dexter/Elmhurst	Available	Negotiable	55,001	1963	2009	R2
Blackwell Middle	5950 Cadillac	48213	E	0.26	Shoemaker/Cadillac	Available	Negotiable	11,390	1963	2003	R2
Brady Elementary	2920 Joy Road	48206	W	6.15	Joy Rd./Linwood	Available	Negotiable	56,720	1920	2007	R5
Bunche Elementary	2601 Ellery Street	48207	E	3.65	Charlevoix/Mt. Elliott	Available	Negotiable	49,026	1955	2010	R2
Burt PK-6	20710 Pilgrim Street	48227	W	3.4	Grand River/Evergreen	Available	Negotiable	49,750	1925	2010	R1
Burton PK-8	1333 Pine	48208	W	3.3	Trumbull/ I-75	Available	Negotiable	44,415	1921	2010	R2
Cadillac Middle	15125 Schoolcraft Street	48227	W	2.8	Schoolcraft/Greenfield	Available	Negotiable	48,192	1919	2007	R1
Campbell PK-5	2301 E. Alexandrine Street	48207	E	5.3	St. Aubin/Mack	Available	Negotiable	56,833	1963	2010	R3 B4
Chandler PK-5	9227 Chapin Street	48213	E	2.9	E. Warren/McClellan	Available	Negotiable	53,975	1905	2004	R2
Cleveland	13322 Conant	48212	E	9.0	E. Davison/Conant	Available	Negotiable	106,749	1925	2009	R2
Cody 9	7350 Southfield	48228	W	5.3	Warren Ave./Southfield Rd.	Available	Negotiable	84,763	1922	2009	R2
Coffey K-8	17210 Cambridge Avenue	48235	W	3.0	W. 7 Mile Rd./Southfield	Available	Negotiable	47,464	1925	2010	R1
Cooley HS	15055 Hubbell	48227	W	17.6	Fenkell/Hubbell	Available	Negotiable	321,024	1927	2010	R1
Coolidge Elementary	16501 Elmira	48227	W	5.0	Plymouth/ W Outer Dr	Available	Negotiable	57,528	1925	2009	R1
Courville Elementary	18040 St. Aubin Street	48234	E	5.1	E. Nevade/Dequindre	Available	Negotiable	79,691	1921	2007	R1
Crosman	9027 John c lodge	48202	W	2	John C. Lodge/Clairmont	Available	Negotiable	43,996	1911	2007	R2
Crosman	8820 Woodrow Wilson	48206	W	3.2	12th/Clairmont	Available	Negotiable	138,056	1920	2010	unknown
Dixon K-8	19500 Tireman Street	48228	W	3.7	Tireman/Evergreen	Available	Negotiable	60,554	1930	2010	R1
Douglass Academy (former) Grade 7-12	2600 Leland Street	48207	E	9.6	Mack/Chene	Available	Negotiable	81,915	1963	2007	R2 B4
Fisher Magnet / Burbank	15600 E. State Fair	48205	E	3.9	E. State Fair/John R	Available	Negotiable	80,448	1930	2009	R1
Foster Elementary	2800 Brush	48201	E	3.3	Mack/ I-75	Available	Negotiable	63,320	unknown	2005	PDH
Fox Elementary	17300 Fargo Street	48234	W	0.2	Pembroke/Southfield	Available	Negotiable	6,550	1962	2005	R1
Garvey K-8	7701 Sylvester	48214	E	4.0	E. Grand Blvd./Mack	Available	Negotiable	48,141	1962	2009	R2
Grayling Elementary	744 W. Adeline Street	48203	E	3.0	W.State Fair/John R.	Available	Negotiable	51,418	1917	2005	R2
Grant Elementary	7479 Stockton	48234	E	5.0	E. Nevada/Van Dyke	Available	Negotiable	48,096	1926	2007	R1
Greenfield Park Elementary	17501 Brush Street	48203	E	3.6	E. Nevada/John R.	Available	Negotiable	72,296	1916	2007	R2
Guyton Elementary	355 Phillip Street	48224	E	4.4	E. Jefferson/Alter Rd.	Available	Negotiable	47,264	1921	2009	R1
Hancock	1745 W. Hancock	48208	W	1.5	W. Warren/Rosa Park Blvd	Available	Negotiable	12,412	1971	2009	R2
Hanneman Elementary	6420 McGraw Street	48210	W	1.8	McGraw/Livernois	Available	Negotiable	45,968	1916	2007	R2
Healy International	12901 Beaverland Street	48223	W	4.2	Schoolcraft/Evergreen	Available	Negotiable	17,828	1949	2007	R1
Henderson -lower	9600 Mettal	48227	E	1.6		Available	Negotiable	28,047		2010	
Higgins Elementary	9200 Olivet Street	48209	W	2.2	W. Fort St./Woodmere	Available	Negotiable	52,570	1930	2007	R2
Holcomb Elementary	18100 Bentler Street	48219	W	5.6	Grand River/Lahser	Available	Negotiable	48,241	1924	2010	R1
Hosmer Elementary	4365 Newport Avenue	48215	E	3.7	E. Warren/Chalmers	Available	Negotiable	48,920	1921	2005	R2
Houghton Elementary	16745 Lamphere	48215	E	3.36	W. McNichols/Lahser	Available	Negotiable	58,368	1924	2009	R1
Hubert Elementary	14825 Lamphere Street	48223	W	6.3	Fenkell/Lahser	Available	Negotiable	72,770	1921	2005	R1

Property Sites	Address	Zip Code	Location East or West	Site Acres	Main Cross Streets	Status	Price	Bldg (GSF)	Year Built	Year Closed	Zoning
J. R. King Elementary	16800 Cheyenne	48235	W	4.4	W. McNichols/Schaefer	Available	Negotiable	52,100	1930	2009	R1
Jamieson PK-6	2900 W. Philadephia Street	48206	W	4.0	Joy Rd./Linwood	Available	Negotiable	64,930	1961	2010	R2
Jemison - OLD	6230 Plainview Avenue	48228	W	3.21	Paul/Evergreen	Available	Negotiable	39,935	1924	2005	R2
Joyce Elementary	8411 Sylvester	48214	E	1.1	Van Dyke/Mack	Available	Negotiable	48,918	1914	2009	R5
JTPA Nursing	8721 John C. Lodge	48202	W	1.3	Lodge/Clairmont	Available	Negotiable	56,059	unknown	2003	R6
Kosciusko Elementary	20220 Tireman Street	48228	W	1.6	Tireman/Evergreen	Available	Negotiable	31,222	1955	2007	R1
Lodge Elementary	17450 Lenore	48219	W	6.04	McNichols/Telegraph	Available	Negotiable	21,636	1950	2009	R1
Lynch Elementary	7601 Palmetto Street	48234	E	1.6	French Rd./Mt. Elliot	Available	Negotiable	43,032	1914	2005	R2
Macomb Elementary	12021 Evanston	48213	E	2.14	Harper/Conner	Available	Negotiable	25,189	1928	2009	R2
Malcom X Academy	6311 Chicago	48204	W	0.87	W. Chicago/Livernois	Available	Negotiable	37,700	1924	2006	B4
Mark Twain Elementary	12001 Gleason	48217	W	5.7	S. Fort/Outer Drive	Available	Negotiable	47,982	1961	2009	R1
Marsh Elementary	18600 Wadsworth Street	48228	W	1.2	Plymouth/Evergreen	Available	Negotiable	23,296	1955	2005	R1
Marshall, J Elementary	1255 E State Fair	48203	E	2.7	E. State Fair/Oakland Ave	Available	Negotiable	60,066	1928	2009	R2 B4
Mackenzie High School	9275 Wyoming	48204	W	25.15	Wyoming/Oakman Blvd	Available	Negotiable	223,960	1927	2007	unknown
McFarlane PK-5	8900 Cheyenne Street	48228	W	4.5	Joy Rd./Schaefer	Available	Negotiable	59,008	1925	2010	R1
McGregor Elementary	16206 Edmore Drive	48205	E	1.9	E. 8 Mile Rd./Redmond	Available	Negotiable	41,098	1952	2007	R1
McKenny PK-6	20833 Pembroke Avenue	48219	W	3.9	Pembroke/Lahser	Available	Negotiable	67,295	1950	2010	R1
McKinney Day Treatment	11131 Kercheval Street	48214	E	4.0	Kercheval/St. Jean	Available	Negotiable	48,092	1964	2009	R2 B4
Monnier Elementary	13600 Ward Street	48227	W	3.9	Schoolcraft/Meyers	Available	Negotiable	50,413	1923	2007	R2
New Middle School @ AFPA East	17201 Annott Street	48228	W	2.2	E McNichols/Hoover	Available	Negotiable	46,789	1948	2006	B4
Parkman Elementary	15000 Mackenzie	48228	W	3.7	Joy Rd./Greenfield	Available	Negotiable	42,758	1940	2005	R1
Rose Elementary	5830 Field	48238	E	1.1	Hendrie/Lambert St	Available	Negotiable	30,500	1911	2007	R2
Sampson Elementary	6075 Begole St	48210	W	2.5	Tireman/Livernois	Available	Negotiable	69,897	1979	2005	unknown
Stark PK-5	12611 Avondale	48215	E	4.1	Jefferson/Lenox (Dickerson)	Available	Negotiable	51,877	1969	2009	R1
Stephens Elementary	6006 Seneca	48213	E	1.7	Van Dyke/Gratiot	Available	Negotiable	83,400	1913	2009	R2
Trombly Alt HS	1095 Hibbard	48214	E	3.2	McClellan/E. Jefferson	Available	Negotiable	52,475	1905	2010	R5
Weatherby Elementary	20500 Wadsworth Street	48228	W	3	Plymouth/Evergreen	Available	Negotiable	25621	1955	2005	R1
Vacant Land	**Address**	**Zip Code**	**Location East or West**	**Site Acres**	**Main Cross Streets**	**Status**	**Price**	**Bldg (GSF)**			**Zoning**
11775 American	11775 American	48204	W	5.66	Elmhurst/1-96	Available	Negotiable	n/a	n/a	n/a	R2
4811 Martin	4811 Martin	48210	W	4.7	Michigan Ave./Martin	Available	Negotiable	n/a	n/a	n/a	R2
Angell Primary VL	8830-8858 Petoskey Ave.	48204	W	1.00	Grand River/Joy Rd	Available	Negotiable	n/a	n/a	n/a	R6
Angell Primary VL	8323 Holmur	48204	W	1.9	Grand River/Joy Rd	Available	Negotiable	n/a	n/a	n/a	R2
Berry VL	3100 Bellevue	48207	E	3.8	Mt. Eliott/Mack	Available	Negotiable	n/a	n/a	n/a	R2/M3
Birney VL	4094 Duane	48204	E	5.5	Dexter/Elmhurst	Available	Negotiable	n/a	n/a	n/a	R2
Blackwell VL	5942 Cadillac	48213	E	0.8	Shoemaker/Cadillac	Available	Negotiable	n/a	n/a	n/a	R2
Bunche VL	2725 Macomb	48207	E	3.0	Charleviox/Mt. Eliott	Available	Negotiable	n/a	n/a	n/a	R1
Campbell VL	4122 St. Aubin	48207	E	n/a	St. Aubin / Mack	Available	Negotiable	n/a	n/a	n/a	R2
Carstens VL	2550 Coplin	48215	E	5.0	Dickerson/Kercheval	Available	Negotiable	n/a	n/a	n/a	R2
Cody 9 VL	7310 Southfield	48228	W	5.2	Warren Ave./Southfield Rd	Available	Negotiable	n/a	n/a	n/a	R2
Detroit City (Former)	3500 McGraw	48208	W	4.3	McGraw/ I-96 Service Dr	Available	Negotiable	n/a	n/a	na	R2
Detroit International VL	8435 Woodward	48202	W	n/a	Woodward/Euclid	Available	Negotiable	n/a	n/a	n/a	R2
Dixon VL	19590 Tireman	48228	W	3.7	Tireman/Evergreen	Available	Negotiable	n/a	n/a	n/a	R1
Delware	90 &100 Delware	48202	E	0.7	Second/Woodward	Available	Negotiable	n/a	n/a	n/a	R5-H
Ferry VL	2920 E. Palmer St	48204	W	1.9	E. Palmer/Joseph Campau	Available	Negotiable	n/a	n/a	n/a	R2
Fox Elementary VL	19974 Oakfield	48235	W	1.2	Pembroke/Southfield	Available	Negotiable	n/a	n/a	n/a	R1
Greenfield Park Elementary VL	41-165 Louisiana	48203	E	0.7	E. Nevada/John R	Available	Negotiable	n/a	n/a	n/a	R2
Greenfield Park Elementary VL	17415-17435 Brush	48203	E	0.1	E. Nevada/John R	Available	Negotiable	n/a	n/a	n/a	R2
Greenfield Park Elementary VL	92-140 E. Longwood	48203	E	0.1	E. Nevada/John R	Available	Negotiable	n/a	n/a	n/a	R2
Hancock PK-5	2276 Ewald Circle	48238	W	0.6	Oakman/Dexter	Available	Negotiable	n/a	n/a	n/a	R2
Higgins Elementary VL	1040 Woodmere	48209	W	0.1	W. Fort/Woodmere	Available	Negotiable	n/a	n/a	n/a	R2
Jemison VL	16370 Tireman	48228	W	2.8	Tireman/ E. Southfield	Available	Negotiable	n/a	n/a	n/a	R5
Kosciusko VL	20380-20390 Tireman	48228	W	2.1	Tireman/Evergreen	Available	Negotiable	n/a	n/a	n/a	R1
Lynch Elementary VL	7575 Palmetto	48234	E	1.6	Lynch Rd./ Van Dyke	Available	Negotiable	n/a	n/a	n/a	R2
Lynch Elementary VL	11621 Van Dyke	48234	E	0.1	Lynch Rd./ Van Dyke	Available	Negotiable	n/a	n/a	n/a	B4

Property Sites	Address	Zip Code	Location East or West	Site Acres	Main Cross Streets	Status	Price	Bldg (GSF)	Year Built	Year Closed	Zoning
Marcus Garvey VL	8820 Sylvester	48214	E	n/a	E. Grand Blvd./ Mack	Available	Negotiable	n/a	n/a	n/a	
Marsh VL	11745 Greenview	48228	W	1.2	Plymouth/Evergreen	Available	Negotiable	n/a	n/a	n/a	
McGregor VL	16257 Bringard Dr.	48205	E	1.9	E. 8 Mile Rd./ Redmond	Available	Negotiable	n/a	n/a	n/a	
Newberry VL	4041-4029 29th Street	48210	W	5.6	Buchanan / Michigan	Available	Negotiable	n/a	n/a	n/a	R2
Next to Old Wilbur Wright	Grand River / Forest	48208	E	20+	Grand River/ Forest	Available	Negotiable	n/a	n/a	n/a	R6
Northeastern Site - Chene/Forest	Northeastern Site - Chene/Forest	48207	E	25+							
2624	2624 E. Hancock	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	R2 B4 R5
2632	2632 E. Hancock	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	R2 B4 R5
2640	2640 E. Hancock	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
2660	2660 E. Hancock	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
2680	2680 E. Hancock	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
2672	2672 E. Hancock	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
2639	2639 E. Forest	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
2649	2649 E. Forest	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
2659	2659 E Forest	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
2665	2665 E Forest	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
2691	2691 E Forest	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
2921	2921 E Forest	48207	E	0.9	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4700	4700 Chene	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4710	4710 Chene	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4716	4716 Chene	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4722	4722 Chene	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4726	4726 Chene	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4738	4738 Chene	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4750	4750 Chene	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4756	4756 Chene	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4762	4762 Chene	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4770	4770 Chene	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4703	4703 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4709	4709 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4717	4717 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4723	4723 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4729	4729 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4733	4733 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4739	4739 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4740	4740 Joseph Campau Ave	48207	E	0.7	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4745	4745 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4751	4751 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4757	4757 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4760	4760 Joseph Campau Ave	48207	E	0.2	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4763	4763 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4771	4771 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4804	4804 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4810	4810 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4816	4816 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4822	4822 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4826	4826 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4830	4830 Joseph Campau Ave	48207	E	0.0	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4835	4835 Joseph Campau Ave	48207	E	1.8	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4836	4836 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4842	4842 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4848	4848 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4854	4854 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4860	4860 Joseph Campau Ave	48207	E	0.2	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4866	4866 Joseph Campau Ave	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	

Property Sites	Address	Zip Code	Location East or West	Site Acres	Main Cross Streets	Status	Price	Bldg (GSF)	Year Built	Year Closed	Zoning
4708	4708 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4712	4712 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4718	4718 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4721	4721 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4724	4724 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4727	4727 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4730	4730 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4733	4733 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4734	4734 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4739	4739 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4740	4740 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4745	4745 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4746	4746 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4751	4751 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4752	4752 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4757	4757 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4762	4762 Grandy	48207	E	0.7	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4763	4763 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4768	4768 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4769	4769 Grandy	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4724	4724 Flower Ct.	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4725	4725 Flower Ct.	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4729	4729 Flower Ct.	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4730	4730 Flower Ct.	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4734	4734 Flower Ct.	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4740	4740 Flower Ct.	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4741	4741 Flower Ct.	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4747	4747 Flower Ct.	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4748	4748 Flower Ct.	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4733	4733 McDougall	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4745	4745 McDougall	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4749	4749 McDougall	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4757	4757 McDougall	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4801	4801 McDougall	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4809	4809 McDougall	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4817	4817 McDougall	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4835	4835 McDougall	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4847	4869 McDougall	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4738	4738 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4754	4754 Mitchell	48207	E	0.0	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4762	4762 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4770	4770 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4801	4801 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4809	4809 Mitchell	48207	E	0.7	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4815	4815 Mitchell	48207	E	0.7	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4818	4818 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4819	4819 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4824	4824 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4825	4825 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4831	4831 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4836	4836 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4837	4837 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4843	4843 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4848	4848 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4849	4849 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	

Property Sites	Address	Zip Code	Location East or West	Site Acres	Main Cross Streets	Status	Price	Bldg (GSF)	Year Built	Year Closed	Zoning
4855	4855 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4860	4860 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4863	4863 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4866	4866 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
4871	4871 Mitchell	48207	E	0.1	Chene/Forest	Available	Negotiable	n/a	n/a	n/a	
Old Wilbur Wright	4333 Rosa Parks Blvd.	48208	W	n/a	12th St./ W. Canfield	Available	Negotiable	n/a	n/a	n/a	
Old Wilbur Wright	4333 W. Canfield	48208	W	14.5	W. Canfield /12th Street	Available	Negotiable	n/a	n/a	n/a	
Owen VL	3033 15th Street	48216	W	2.9	Martin Luther King/14th Street	Available	Negotiable	n/a	n/a	n/a	R2
Owen VL	3019 - 3043 16th Street	48216	W	n/a	Martin Luther King/14th Street	Available	Negotiable	n/a	n/a	n/a	R2
Sampson VL	6075 Begole	48210	W	2.5	Tireman Livernois	Available	Negotiable	n/a	n/a	n/a	R2
Sanders VL	8700 Bryon St.	48202	W	5.7	Clairmont / Lodge Fwy	Available	Negotiable	n/a	n/a	n/a	R2
Scripps VL	2100 Hurlbut	48211	E	1.4	Cadillac/Kercheval	Available	Negotiable	n/a	n/a	n/a	R2
Scripps VL	2205 Bewick	48214	E	1.5	Cadillac/Kercheval	Available	Negotiable	n/a	n/a	n/a	R2
Stark VL	420 Conner	48215	E	4.1	Jefferson/Lenox	Available	Negotiable	n/a	n/a	n/a	R1, R3
Stephens VL	5974 Seneca	48213	E	1.6	Van Dyke / Gratiot	Available	Negotiable	n/a	n/a	n/a	R2
Trombly Alt. HS VL	1091 Hibbard	48214	E	3.3	McClellan / E. Jefferson	Available	Negotiable	n/a	n/a	n/a	R5
Trombly II Site VL	7630 Harper	48213	E	6.1	Harper /Van Dyke	Available	Negotiable	n/a	n/a	n/a	R2, B4
Trombly II VL	7630 E. Edsel Ford	48213	E	3.0	Harper /Van Dyke	Available	Negotiable	n/a	n/a	n/a	R2
Weatherby VL	12099 Fielding	48228	W	3.0	Plymouth/Evergreen	Available	Negotiable	n/a	n/a	n/a	R1
Woodward	2900 Wreford	48208	E	8.0	W. Grand Blvd./Linwood	Available	Negotiable	n/a	n/a	n/a	R3 B4

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Fig.	Description and Source	Pg.
1.1	1815 Survey of the Detroit River, map. Source: Arthur M. Woodford, *This is Detroit: 1701-2001* Permission: Public Domain, permission not required	7
1.2	Fort Pontchartrain Du Detroit, Illustration. Source: Arthur M. Woodford, This is Detroit: 1701-2001 Permission: Public Domain, permission not required	7
1.3	Bird's Eye View of Detroit in 1818, Illustration. Source: Arthur M. Woodford, This is Detroit: 1701-2001 Permission: Public Domain, permission not required	8
1.4	The Detroit shoreline in 1794, Painting. Source: Arthur M. Woodford, *This is Detroit 1701-2001* Permission: Public Domain, permission not required	8
1.5	Judge Woodward's Plan for Detroit in 1807, map. Source: www.historydetroit.com Permission: Public Domain, permission not required	9
1.6	Bird's eye view of Detroit in 1890, Illustration. Source: Arthur M. Woodford, *This is Detroit 1701-2001* Permission: Public Domain, permission not required	10
1.7	Bird's eye view of Detroit in 1889, Illustration. Source: www.loc.gov Permission: Public Domain, permission not required	11
1.8	The first moving assembly line, photograph. Source: www.americaslibrary.gov Permission: Public Domain, permission not required	12
1.9	Suspended traffic light, photograph. Source: Arthur M. Woodford, *This is Detroit 1701-2001* Permission: Public Domain, permission not required	13
1.10	The first Chevrolet car, 1912, photograph. Source: Arthur M. Woodford, *This is Detroit 1701-2001* Permission: Public Domain, permission not required	13
1.11	World War One troops, photograph. Source: www.detnews.com/michigan history Permission: Public Domain, permission not required	14
1.12	B-24 bombers assembly plant, photograph. Source: Walter P. Reuther Library, Wayne State University Permission: Granted	15
1.13	Detroit City population vs. Metropolitan Detroit population from 1920 - 2010 Drawn by author, data source: Hamilton Anderson Associates	19
1.14	Central High School, Detroit Michigan, photograph. Source: www.loc.gov Permission: Public Domain, permission not required	24

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Mike Rutherford < >

Permission to Use Copyrighted Material in a Master's Thesis

Site Admin < > Mon, Feb 11, 2013 at 4:02 PM
To: Mike Rutherford < >

Hello Michael,

Thanks for getting in touch with us about using an image. We'd be happy to allow use of the image, with the only requirement being that you give attribution to Detroiturbex.com.

Thanks for checking with us beforehand.

- Detroiturbex.com
[Quoted text hidden]

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1102K

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Mike Rutherford < >

Re: Permission to Use Copyrighted Material in a Master's Thesis

Elizabeth Murray Clemens < > Tue, Feb 12, 2013 at 12:14 PM
To:

Hi Michael,

I was just forwarded your request regarding an image from the collections of the Reuther Library that you would like to include in your Master's Thesis. We are indeed the copyright owner of the image and you have permission to include it in your work. Please credit "Walter P. Reuther Library, Wayne State University."

Best of luck with your thesis!

Regards,

Elizabeth

Elizabeth Clemens
Audiovisual Archivist
Walter P. Reuther Library
Wayne State University
Detroit, MI 48202

Gmail by Google

Mike Rutherford < >

Permission to Use Copyrighted Material in a Master's Thesis

Corissa Leveille < > Wed, Feb 27, 2013 at 11:50 AM
To: Mike Rutherford < >

Hello Mike,

In terms of using the imagery that you speak of for an educational endeavor, we are more than happy to confirm that this is acceptable. In regards to the images that you have selected, it will be important to properly site each image and give reference to them. For the first image, the photo credit can go to *Detroit Works Project Long Term Planning Civic Engagement Team Member* while the map is actually from the *City of Detroit Planning and Development Department from Detroit Works Project 1.0.*

For more maps and illustrations, I would highly encourage you to look through the data found in the final Strategic Framework Plan (as the map you have selected is rather outdated). If you need any high resolution images from the Framework Documents, just let me know and I will try to make them available to you in a timely manner. I know the Neighborhood Chapter might be of significant value to you as there is a map of community selected assets, which was information that we gathered during our intensive Civic Engagement outreach.

Good luck with your thesis and if you need anything or have any questions about the project, do not hesitate to send a message!
Corissa Leveille
[Quoted text hidden]

Gmail by Google

Mike Rutherford <>

FW: Permission to Use Copyrighted Material in a Master's Thesis

Edward Lynch < > Mon, Feb 11, 2013 at 4:14 PM
To: "mrutherford17@gmail.com" < >

Michael,

I have attached the Detroit Future City information requested below. Additionally, through the course of the project much of the information has been updated. I have also included updated versions of these maps (2010 census for population density and 2010 Median Sales Price for housing value). I have also included the base map that we were using for the project.

If there are any questions feel free to let me know

Edward

Edward Lynch

hamiltonanderson
DETROIT I LAS VEGAS I NEW ORLEANS
1435 Randolph No. 200 Detroit, MI 48226
www.hamilton-anderson.com

Mike Rutherford < >

Permission to Use Copyrighted Material in a Master's Thesis

Wes Michaels < > Mon, Feb 11, 2013 at 12:21 PM
To: Mike Rutherford < >

Michael,
Sounds good. Please send a note when it is finished so we can keep a copy for our records.

Thanks,
Wes Michaels

Spackman Mossop Michaels
7735 Maple Street
New Orleans, LA 70118

[Quoted text hidden]

Gmail by Google

Mike Rutherford <

>

Permission to Use Copyrighted Material in a Master's Thesis

charles shaw < > Tue, Feb 12, 2013 at 7:24 PM
To: Mike Rutherford < >

Hi Mike,

Yes by all means feel free to use whatever you would like. I look forward to seeing your thesis. I am very interested in Detroit and its new life.

good luck

Regards

Charles

Charles Shaw
Smiley Building
1309 East Third Ave. #35
Durango, CO 81301

[Quoted text hidden]

Mike Rutherford < >

RE: Message from LEDC user

Karl Dorshimer < > Wed, Feb 13, 2013 at 7:09 AM
To: "mrutherford17@gmail.com" < >

Mr. Rutherford,

The LEDC is the owner of that image. You may use the image as long as you property cite it.

Karl Dorshimer
Lansing Economic Development Corporation

Mike Rutherford < >

RE: Request Information Form

John Monaco < > Fri, Feb 15, 2013 at 8:52 AM
To: "mrutherford17@gmail.com" < >
Cc: Andrew Mendola <andrew.mendola@pictometry.com>

Hi Mike,

Permission is granted to use the attached images as described in your note as long as:

1) you include a copyright attribution on each image as follows:

©XXXX Pictometry International Corp.

With XXXX replaced by the year of the imagery.

2) These images you have selected from the Detroit area are all U.S. locations. We cannot grant permission for non-U.S. imagery.

Also, not required but a copy of your final thesis would be appreciated. Good luck.

John

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